A Clinical Lecture
ON
GASTRIC AND DUODENAL ULCER.

DELIVERED AT THE LONDON HOSPITAL, FEBRUARY, 1910.

BY

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GENTLEMEN,—I have elsewhere given at length what I believe to be the correct pathogeny of gastric ulcer. The word "pathogeny," I may say, means simply the pathological origin, as it were, of gastric ulcer; it is just a mixture of pathological physiology and the resultant pathological anatomy; it is the connecting link between the two. I have there stated my belief that in all cases, as met with in ordinary practice, a gastric or duodenal ulcer arises originally as a tiny focus of inflammatory necrosis in one of the numerous, practically innumerable, small collections of adenoid tissue met with in immediate proximity to the epithelial cells in the stomach and duodenum. I told you that I based my belief on, first, the very simple observations, made to fit no preconceived theory, by Dr. Beaumont on St. Martin's stomach; and, secondly, on the microscopical work of Dr. Charles Miller, carried out on stomachs in our pathological department, and given in detail, with drawings of actual specimens, in the BRITISH MEDICAL JOURNAL, volume ii for 1906. I then proceeded to show how Dr. Miller's explanation would fully explain every single one of the clinical and *post-mortem* findings hitherto recorded in connexion with gastric and duodenal ulcer.

I have said, "in all cases met with in ordinary practice." This wants a little explanation. In the first place, it would be an injustice to omit entirely the experimental work that has been done on gastric ulcer, proving that emboli and poisons which cause small patches of local death in the mucous membrane of the stomach are certainly capable of producing the *post-mortem* figure which belongs to the acute peptic ulcer; the clean punched-out "steppy" appearance, an appearance which is in fact produced by the digestion of the embolized spot, or at least disintegration aided by digestive processes. I am not quite sure that it is a question purely of digestion of a piece of dead meat in the stomach, or whether there may not be also some active living inflammatory processes going on as well; these are, at any rate, manifest enough when the ulcer has lasted some time. Dr. Turnbull, the Director of our pathological institute, informs me that he has seen these acute ulcers in cases of septic death, ulcerative endocarditis, etc., due, in his opinion, entirely to minute septic emboli, and he gave me on Monday this particular reference:

P. M. 115, 1910, February 1st. A little child, female, aged 3½, a deep, subacute, duodenal ulcer, ⅝ in. in diameter, with shelving border touching the pylorus on the posterior surface. The case was one of an accidental death from gangrene and purulent ulceration of the right knee, that is to say the right knee was damaged by external violence, and the child died of septic trouble arising from wound infection, the small septic emboli invading the gastric arteries.

That is a case in point indicating how emboli can cause these ulcers. So I have used the words "in ordinary cases"; for though we must recognize that an embolic origin is a possible one, yet I would urge that in the ordinary case of gastric or duodenal ulcer we have generally no evidence that there is any infective endocarditis, or, indeed, any other source from which emboli could arise. But we do have septic matter, whether bits of ordinary food (which are certainly not aseptic) or small doses of pus from the gums, etc., which, as well as the mechanically hard portions of food, are quite capable of setting up the local focus of inflammation which my theory demands. The results are the same whichever cause is at work; there may be an embolus which blocks an artery and so destroys the part by cutting off its blood supply, or, in the more ordinary way, the *materies morbi* comes into the stomach and gets at the part and inflames it by direct contact instead of killing it by the embolic method. The difference is merely in the process.

I feel obliged to labour this point of the origin of the ulcers, because it is a crucial one in my argument, which, briefly stated, runs as follows, namely: That gastric or duodenal ulcer is what we commonly term a diathesis, that is, a natural proneness of the body to a given disease, and that the actual visible ulcer itself is an acute, unusually virulent attack of the disease or outbreak of the diathesis, just as an acute attack of gout or rheumatism is an acute outbreak or attack of gout or rheumatism in a person prone to those diseases. And just as we are ignorant of why one man is more prone than another to gout—we know a good deal about what will induce an attack in one so predisposed—so we are ignorant of why one person, or indeed one sex, should be so prone to an attack of gastric ulcer, or why the duodenal form, primarily at least, should be practically the only form seen in male subjects. (In ten years, 1899–1908, there were 113 duodenal ulcers admitted to the hospital, and of these 97 were in males.) Those of you who were with me in the *post-mortem* room a week or two ago will remember a man with duodenal ulcer who had five or six gastric ones also. The well recognized liability of some people to slight or even severe attacks of tonsillitis is a highly suggestive fact in my favour, and certainly such liability does not cease on removal of portions of the tonsil. There are plenty of analogous diatheses also which, if not supporting my views, at any rate prevent them from being considered ridiculous or far-fetched. I think they strongly support my view, namely, that this tendency to gastric ulcer is definitely a diathesis, attacking some people, or hereditary in some people, and not present, or very slightly so, in others.

We must now pass on to consider what, in my opinion, is the most important point about gastric and duodenal ulcer, if not, indeed, the only question which the patients care about—namely, whether the treatment should be by medicine or by surgery. Last week, you will remember that in order to clear the ground I gave you a complete, full, and detailed account of what medical treatment in my practice means—that is to say, my own methods of treatment.

There can be no question but that certain *results of ulcer* must be treated by surgical means, but it is to my mind equally certain that the diathesis—and, indeed, a simple acute attack of the disease—can be, and indeed must be, treated by the physician; and it is mainly to oppose what I consider the exaggerated claims of surgery recently put forward by Mr. Moynihan that I have taken up your time to-day with the subject. I listened to Mr. Moynihan's paper, and I subsequently read it in print, and also his article on appendix dyspepsia; and whilst I am bound to agree with a great deal of what he has said and written, I feel obliged to protest on general grounds and on experience against his main conclusion, which it is no exaggeration to say amount to this—anyone who suffers from the symptoms of *painful* indigestion should have the abdomen opened. I do not honestly think I am doing him any injustice, judged by his own words, when I say that that is his meaning. If you have painful indigestion you have an ulcer, and if you have an ulcer it ought to be dealt with surgically. I certainly do not agree with that opinion. Equally emphatically must I protest against the decision of my colleague, Dr. Robert Hutchison, who in the discussion admitted in so many words—and I have it from him directly also—a duodenal ulcer diagnosed with certainty must be treated surgically. That is a statement which I for one cannot admit to be correct in any way or shape, and I am going to speak against it and act against it to the utmost of my power. In order to support my protest by stronger means than my own personal instincts and experience I appealed to the registrars and to our pathological department for information with statistical details of the disease as seen in our wards and *post-mortem* rooms over a series of years; and I would like here to express my thanks to Dr. Zundel and Dr. Turnbull for their trouble in the matter.

Taking first the statistics of the wards, I find that for the ten years 1899–1908 we have had in the hospital for treatment a total of 1,255 cases of gastric and duodenal ulcer, out of which there have been 113 duodenal, the remaining 1,142 being gastric. These patients arrived in the hospital as follows: 757 of them came in on the medical side, and of those 757, 141 were transferred to the surgeons

to deal with. The surgeons had 357 originally admitted under their care *plus* 141 transferred to them from the physicians. I maintain that those figures, though not very large in themselves, and certainly not large enough to completely satisfy the statistician, are certainly quite large enough to give us important clinical information. Subtracting 141 from 757 leaves us 616 which were treated entirely by medicine. What happened to those 616? (I may note in passing that through some arithmetical error they are reduced to 606.) Out of 606, then, 57 died, a percentage of 9.4.

I am not concerned, just at this moment, when talking of the distinction between medical and surgical treatment, with the precise cause of death; for, admitting the fact of death, whether they died of exhaustion simply or from vomiting, or from haemorrhage, or from perforation, is more or less immaterial. Now in indicating the fate of the remainder—those who did not die—our residents have three categories wherein to put them on discharge—relieved, unrelieved, and cured. I have no doubt that putting the term "cured" to a case of gastric ulcer rather represents the enthusiasm of youth than a proof of the occurrence of a complete healing of the gut; while "relieved" refers to the more cautious attitude of expectancy adopted by a man who thinks himself more conscientious. I am not very much concerned with the C's and R's, and I have lumped them together, and I find that not one of those 549 left the hospital unrelieved. I am bound to admit—and it may be considered an important admission, but I do not think it is from my present point of view—that the 141 who were transferred to the surgeon might have died; that is a possibility, and indeed a probability, had nothing been done under the circumstance indicating operation. Assuming, as we have a right to assume, that "relieved" means that the symptoms of pain and vomiting had disappeared (when it comes to a question of accurate diagnosis of what is ulcer and what is indigestion, the line is very indistinct, but vomiting and pain are certainly suggestive of ulcer, but I am not concerned to traverse the diagnosis of my colleagues, who in all these cases believed that ulcer was present), we have 549 out of 606, or in other words 90.5 per cent., which were cured of their symptoms. Notice I do not use the term "cured of their diathesis" nor "cured of their ulcers." I say it is impossible to be certain that the ulcer has healed simply because the symptoms ceased. (What the meaning of that cessation of symptoms is I am not clear in my own mind, though I throw out one possible suggestion—namely, that the mucous membrane gets thrown into folds, and that a fold covers in an ulcerated surface, and therefore no fluid or anything else can come in direct contact with the ulcer.) All the same, there is some fairly strong evidence from the *post-mortem* room that these people may be cured of their ulcers, for scars of old ulcers in the stomach and duodenum are met with with sufficient frequency to warrant the statement that ulcers do frequently heal under non-operative conditions—that is to say, under medical treatment. We have a number of cases in the *post-mortem* room in which scars are found and in which it is perfectly certain that operation was not undertaken. Dr. Turnbull furnishes me with the following statistics for the one year 1909 (as a matter of fact, he has given me three years of statistics of perforations, and other facts, but it is only in the year 1909 that his attention has been drawn to the subject, and in that period he was particularly careful to see that every stomach and duodenum which passed through the *post mortem* room was carefully examined for scars): In 1909 he found 10 cases of ordinary still existent duodenal ulcer, in one of which the scar of an old healed second ulcer was present; he also found 5 cases of scars of old ulcers in the duodenum, the possessors of which died of something totally different. Thus, small as these figures may be, they prove to complete demonstration the fact of the possibility of the healing of duodenal ulcer without surgical interference, and that is the one point which I wish to prove and to insist upon: that an ordinary gastric as distinguished from a duodenal ulcer can heal is, I think, admitted by every one without requiring further proof.

Now, think of what I have been proving. I have been combating my colleague Dr. Hutchison's statement that if a duodenal ulcer is present he thinks surgical interference is imperatively called for, if you can diagnose it. My point is that while it may be called for for other conditions, yet simply for the fact of ulceration it is not called for, because I have shown that in one single year we have got 6 cases found on *post-mortem* examination with healed duodenal ulcers that have never been operated upon. I cannot therefore plead guilty to any proved exaggeration when I claim that 90 per cent. of ulcers treated medically are as surely cured as when they are treated surgically. Note the comparison I make, "as surely cured." I am not certain that when we treat them medically ulcers must necessarily heal, but I equally claim that when treated surgically there is no greater proof that the ulcers heal beyond the cessation of symptoms, and I have proved that under any circumstances ulcers can heal.

It is tacitly assumed, at any rate by those who have not specially studied the question, amongst whom must be included every one of your patients, that after medical treatment relapse is the rule, and the patients are really no better, whereas after surgical treatment they are completely cured, and need fear no relapse. It is often stated that if a patient undergoes surgical treatment he will be completely cured; if he be put to bed and treated with medicine he will be relieved of symptoms, but the ulcer will recur. That is definitely a fallacy, as I shall now show by the statistics of relapses. These figures will have to be very much revised, not that they are incorrect, but I cannot positively assert that they represent 606 different persons, how far they may include relapses—a point that must be ascertained before the figures are used for other purposes. But taking them as Dr. Zundel has given them to me, out of 606 cases medically treated, 75, or 12.3 per cent., were known to have relapses at a less or greater interval after the cessation of treatment. What I do not know in connexion with them is how many of these 606 cases would represent relapses from attacks which have occurred before they came to the hospital. So that I must admit that the proportion of relapses under medical treatment may be rather larger, and quite probably is, and I am not concerned to deny it, because I have never raised that point; I have never said that if you will give me a gastric ulcer to treat I will guarantee to cure it so that the patient will never be ill again; that is not my position at all. I am surprised that the number is so low as 12.3 per cent.; I think probably it will be found to be nearer 20 or even 30 per cent. of relapses if one knew the previous histories (Mr. Moynihan's paper was only read last month, and in one month we certainly have not had time, and I could not throw on our registrar the work of investigating all these 1,255 cases from this point of view, because it means reading the history of every one of them, and tabulating the number of times they have been laid up in bed at home or in other hospitals with gastric ulcer, or with symptoms which are those of gastric ulcer). Now out of 321 cases surgically treated, 28, or 8.9 per cent., relapsed; so that after surgical treatment it may be that the liability to relapse is not quite so great, but they do relapse, and in a very unsatisfactory percentage, and the difference between the medical and the surgical treatment is not so great as would lead a patient, or should lead a doctor, to ignore the chances of getting no improvement after submitting to the risks of operation.

I do not want to lay very great stress on those risks of operation, but I do wish to point out that they are not a negligible quantity, because I find, taking the statistics for the years from 1903 to 1907 on the surgical side, that they had 314 cases to operate upon, and I have deducted at once all cases of perforation, because the prognosis of perforation is such that it is not fair to surgeons to include them; but taking the cases which do not perforate, but in which the symptoms are of sufficient magnitude to make it advisable that the surgeon should interfere—and he has had a favourable chance of interfering, a reasonable surgical chance—of the 314 such no less than 55 died; in other words, there was a mortality of 17 per cent. I do not want to say that that is a very big mortality, because it is not, and gastric ulcer, if left to go on after surgical interference seems desirable, is highly fatal; and I think it can fairly be urged by a surgeon, "It is true I have killed 17 per cent., but I have saved the remaining 83 per cent. from

nearly certain death." But my present point is that surgical interference is not without its own risks, and it has to be compared with the death-rate of those who are absolutely left alone, which rate I gave you just now, 9.4 per cent. You cannot strictly compare those by subtracting one from the other.

These statistical details require a great deal of work and elaboration to enable us to arrive at complete answers to many subsidiary questions surrounding the subject of ulceration. I shall get Dr. Zundel to work them out more elaborately in the next six or eight months. But, partly from these statistics and partly from general clinical experience, I feel justified in giving you for your guidance the following propositions as the guiding indications for surgical and medical treatment respectively.

The first point is this: that a first simple attack of ulceration should invariably be treated by medical means for a period of at least a fortnight, to be extended if necessary to a month. You will have gathered the arguments from what I have said. Secondly, I lay it down that if at the end of a month there are no signs of improvement as regards pain when the patient has resumed active life, we may begin to entertain the idea of surgical interference, because we may be reasonably certain that the ulcer has not healed. But even here I would myself repeat the medical treatment with rest in bed for another month, and that is a proposition which I feel certain it is impossible to controvert. My third proposition is that the above two hold, no matter what the age or sex of the patient may be, but that age and sex have a good deal to do with deciding for or against surgery. Considering age alone, there is very little, in fact no advantage in resorting to surgical interference under the age of 30, unless indeed signs of stricture are too evident to be misinterpreted, in which case surgical interference is imperative on account of and to cure or to obviate the stricture. But the chances of cure of the ulcerative diathesis are *nil*, for all the relapses after surgery, or nearly all of them, are in young subjects under 35. We know, however, the evils we are dealing with, and can estimate very nicely the means we have for dealing with them, and can act accordingly—that is to say, the evil we are dealing with is the stricture; we can estimate its extent fairly accurately by observations on the nature and the amount of the vomit, and the amount of loss of flesh. We have the clinical data, and we can wash the stomach out and see how much it will hold, and so on. So that, except for a stricture, do not operate at or under the age of 30. After the age of 30, and the later after 30 the better, the greater the advantage of surgical interference.

We have every reason to believe that as age advances the adenoid tissue spoken of above (and here is the importance of my original thesis) atrophies and becomes less vulnerable. But if an ulcer do occur after 30, the tissue has proved itself to be vulnerable, and it seems to have a less tendency to heal, and the ulcer a greater tendency to spread, and to produce serious results. Hence a greater readiness on our part to consider surgical intervention, because (*a*) there is less tendency to relapse, so that a complete cure may result; (*b*) there is a greater danger of serious results while trying medical treatment; (*c*) we know that medical treatment is less likely to prove of service because of the intractability of the ulcer. After the age of 30, then, I am not by any means averse to operative interference from that point of view; but still, remember what I have said about my first two propositions, that for the first attack, no matter what the age or the sex, do not operate until you have given at least two months' treatment.

My fourth point is obvious to anybody, that for stricture and perforation surgical interference is absolutely imperative. Nothing more need be said about them; the necessity for the surgeon is too obvious. The fifth point has regard to haemorrhage alone as an indication for surgical interference. Here we are on very delicate and debatable ground; but it would seem again that age has chiefly to be considered and the nature of the bleeding. Take the very common case in which a girl of about 20 years of age, anaemic, is suddenly seized with a very profuse haematemesis. Operation is not indicated in these cases as a matter of urgency; it is practically useless to think of it to check the bleeding, because long before her stomach can be opened she will have bled to death if she is going to do so. In these young subjects, I think I might definitely tell you, I have never seen a fatal case of haematemesis. I expect that is not strictly true, as I may have seen such a case and forgotten it, but such cases are so rare that at this moment I do not remember one. Should the case prove rebellious to medical treatment, the fact of this haemorrhage has to be borne in mind when we are considering operation at a later stage. But that is another matter. I say that in young subjects with profuse haematemesis it is no good to call in a surgeon because of the haematemesis. Call the surgeon in later because of gastric ulcer. Taking the other extreme and, I think, equally clear case where surgery is of use, it is the subject between 30 and 50 years of age who has had five or six moderately severe haemorrhages in a week. I have known several cases of that description: sick on Thursday, perhaps a pint of blood; sick again on Friday, with about a pint; sick again on the Saturday, with perhaps rather less than a pint; sick again on Sunday, with another pint; getting very exhausted, repeated haemorrhage, in a middle-aged subject. I say that in that sort of case operation is distinctly indicated and urgent for the haemorrhage; we may hope to get into the stomach and secure the bleeding point, which obviously is prevented from closing by some local process, but is not sufficiently open to cause one big fatal haemorrhage, such as occurred in a man we saw the other day who was under my care with duodenal ulcer, in which we found a hole into which a good big probe could be passed into an artery the size of the radial; he died twenty-four hours after admission—the puzzle is how he lived so long. Those are two extremes—the young girl with her one profuse haemorrhage, the middle-aged person with repeated smaller but severe haemorrhages. Decision in them is easy. But between these you will get a number of intermediate cases, in which I must admit that the balance in favour of or against surgical interference is very nicely arranged, and I can only say you must first of all put the patient to bed and treat her temporarily with complete starvation while you are making up your mind. And then I think you should endeavour to place that patient under conditions in which an operation can be promptly performed, if you make up your mind to do it. I think that your opinion will be in doubt many times. You will, of course, see the patient at least twice a day; that is imperative. On the first haemorrhage you will say, "I will have a surgeon to the case." In the next twelve hours you will find there has been no further haemorrhage, and then you will say, "We will wait a bit, as she is not very bad." You will, of course, estimate the pulse in frequency and volume, the rate of breathing, and so on, as well as the degree of restlessness. In other words, you will see what is the effect of the loss of blood on the patient. During this time you must treat them with the free doses of opium, by which I mean 10 *m* of the tincture every two hours, until you have the patient somewhat sleepy. This helps both the mental and the vascular condition. You will go the next twelve hours and find the patient tolerably happy and able to talk cheerfully, not looking very pale and not being very thirsty; she does not think she is seriously ill, and is not much frightened. You may say, "The patient is going on nicely, and I think we will wait a bit. I will come back again in another twelve hours." And next time you come you may have a vessel shown to you containing a pint of blood. Then you say, "I must have an operation now." But the parents say, "Do you think it necessary, doctor? We would rather it was not done." You say, "We will wait another twelve hours." You will keep on oscillating in your opinion. The only thing for you to do is to keep a very strict watch on the pulse and respiration. If you find the pulse getting more frequent, over 105, for instance, if you find your patient getting more thirsty, and more alarmed, and readier in her own mind to think of operation, then I say call in the surgeon at once.

The next point has regard to the question of relapses. How many relapses should you allow a person before you call in a surgeon? I would say certainly six or seven, as a working rule; but a good deal depends on the patient, whether she will consent to operation or not. I can tell you of a patient who was under my own care. I brought her here under the hope that she would consent to operation, for I knew that she had had at least seventeen severe attacks of haemorrhage, and had never been free from

indigestion since about 1889. I took her in about four years ago. I tried to persuade her to have an operation done, but she declined. She was very ill, and I said you must have an operation done; but again she lost her symptoms with the rest in bed and medical treatment, and she persistently refused to have the operation. What has become of her since then I do not know; I can give you that as an experience, but it would be very unsafe to trust to her case for laying down rules; and I think six or seven relapses in a period of about five years should be the limit in regard to allowing medical treatment to go on. Unfortunately four or five years' duration and six or seven relapses will not always be allowed you. This is probably the meaning of the death-rate in those medically treated; they have died of perforation or haemorrhage under circumstances in which it was impossible to do anything, and surgeons will say, why do you not, then, have them surgically treated in order to anticipate these catastrophes? I do not hesitate to say, strange though it may appear, that it is absolutely impossible to be certain that one of these catastrophes is going to occur. I go further, and I say that even if the surgeon be called in on the first occasion, you cannot guarantee that the catastrophe will not occur after that, because the death-rate after relapse and after operation has been something considerable. Therefore, lame as the conclusion may seem, the fact remains that you cannot be certain a catastrophe will not occur in any given case of gastric ulcer. Still, provided there is no catastrophe, I say five or six relapses over 30 years of age, and then *qua* relapses only, provided the patient's consent be obtained, operate.

Lastly, is there anything to be felt in the shape of a lump in the abdomen which means either simply a scar without adhesions, or a scar adherent to the anterior abdominal wall, or to the liver, or somewhere else? Shall you operate? I must answer that for you by saying, Yes; generally speaking, you should operate if you find these big organic lumps, because it means chronic ulcer which will not heal without treatment. I should have made this statement without hesitation if it had not been for my experience of a case in the last month.

The patient came to me a month or six weeks ago, when I found a big organic lump, and I said, This ulcer has gone too far for medical treatment; you must come in and be operated upon. She consented and came in. In hospital one is never in a violent hurry; we can always get surgical treatment for any emergency in half an hour or so, and so we were not in a hurry. One cause of delay led to another in this case, and she seemed to be improving very much. We got her teeth removed for one thing, and I believe that they were poisoning her, for she had very bad pyorrhoea alveolaris. The result is she had no operation, but she steadily improved under medical treatment and her hard lump disappeared.

Such a favourable result in such a case is not to be commended to you as a thing to expect, but it certainly should be mentioned to you as a fact; so I shall still have to repeat that if there is an organic lump present, operate. It must be taken as one of the indications for operation, but again I insist that even this is not absolutely infallible. The only infallible indications for operation are stricture or perforation; those are the only ones which I know of to which there is no possible exception. The perforation may, of course, be so bad that the surgeon will not operate, but that does not really affect the point which we are discussing now.

We learn from the *New York Medical Journal* that on February 1st, 1910, Senator Owen, of Oklahoma, introduced into the United States Senate a bill providing for the establishment of a Department of Public Health under the supervision of a Minister of Public Health, who is to be a Cabinet officer, with a salary of 12,000 dollars a year. The bill provides that all departments and bureaus belonging to any department, excepting those of War and of the Navy, affecting the medical, surgical, biological, or sanitary service, or any questions relative thereto, shall be combined in one department, to be known as the Department of Public Health. The work of the department will embrace every agency of the United States for the protection of the health of the people of the United States, or of animal life. The bill provides that the secretary shall establish bureaus of biology, chemistry, veterinary service, and of sanitary engineering. The bill was referred to the Committee on Public Health and National Quarantine.

A Lecture
ON
DYSMENORRHOEA.

Delivered at the Medical Graduates' College and Polyclinic.

By R. A. GIBBONS, M.D.,
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Gentlemen,—The subject we have to discuss is one which ought to be of interest to every practitioner of medicine, for this affection is apt to be the cause of suffering from the time a girl is about 12 or 14 during the many years up to the menopause; and although the worst cases come under the observation of the gynaecologist, yet before doing so they pass through the hands of the family physician, so that there is really nothing more important in the ordinary treatment of the diseases of women, or for which advice is more frequently sought, than the pain suffered at the time of menstruation. It so frequently shatters a girl's health before she has become a woman that too much attention cannot be paid to the careful study of this disease. I am certain that the judicious management of dysmenorrhoea prevents, in many cases, girls and women drifting into chronic invalidism. Although many regard dysmenorrhoea as a symptom of something occurring internally, it is certainly a disease. Healthy girls never have pain with menstruation; it occurs practically with no symptoms whatever, and except for its appearance might be disregarded as far as in any way affecting the health or well-being of the individual. Unfortunately, the minority of women menstruate in this manner, suffering no pain. It has been estimated that only about one-third of all women menstruate without pain. This shows how important the subject is.

I propose to deal with the subject principally under the head of etiology before passing on to what is, of course, the most important consideration for us—namely, treatment; but in the first place I shall merely mention the divisions into which dysmenorrhoea has been classified before giving my own view of them. It is usually said that the forms of dysmenorrhoea are idiopathic, congestive, membranous, spasmodic, obstructive, ovarian, and even neurasthenic. Some believe there is a form of dysmenorrhoea which is purely nervous, and which may be due to faulty innervation of the uterus, be it of an anatomic or a functional defect. This variety they speak of as neuralgic dysmenorrhoea.[1] Others think that it is easy to divide the various forms clinically into uterine and extrauterine;[2] and others, again, have classified them into primary and acquired.

The greater the experience one has, the more convinced one is that these divisions are entirely unnecessary. I know of nothing to make me alter the view I have long held—that there is only one form of dysmenorrhoea, that is, spasmodic, and that therefore all other varieties, or so-called varieties, merely produce confusion. If the word "dysmenorrhoea" were confined to the disease to which, in my opinion, it ought only to be applied—namely, painful contractions of the uterus during menstruation—confusion could not arise, but because it is so frequently associated with affections of the ovaries, Fallopian tubes, or certain conditions of the nervous system, so many forms of the disease have been described. To speak of neurasthenic dysmenorrhoea means only that a woman suffering from neurasthenia has superadded to her condition dysmenorrhoea, and in such a case it is quite possible that the doctor attending her, or prescribing for her, may think that dysmenorrhoea has supervened in the neurasthenic woman, and that therefore neurasthenic dysmenorrhoea is a legitimate name for the affection. But, as a matter of fact, pain is relative, and anything which lowers the tone of the nervous system, such as the onset of menstruation, is apt to bring on pain in certain parts, or to aggravate the sensation from very slight to severe. The most important division of dysmenorrhoea, and one which demands a considerable amount of attention, owing to the fact that it is always so constantly referred to, is obstructive or membranous dysmenorrhoea. It is considered that membranous dysmenorrhoea produces obstruction on account

of the membranes or shreds which are said to block the cervical canal, thus preventing a free flow and causing spasm of the uterus. As I have already said, I do not acknowledge that there is any real obstructive form. It will be found on examination that many women pass membranes or shreds, which are only known about when inquired into. Anteflexion is also said to produce obstruction, but it is well known that obstruction is not absolutely present. According to a paper by Dr. Gustav Kolischer,[3] who has observed certain cases, the blood normally flows in a steady stream from the external orifice to the posterior fornix of the vagina, only occasionally, and then gradually, increasing and decreasing in volume; but in painful menstruation during attacks the blood is forced out in jets from the external os, evidently by forcible contractions of the uterine body.

All those who have constantly examined cases before operating for dysmenorrhoea know by experience that, although the ordinary uterine sound cannot always be admitted, yet a probe of smaller size can invariably be passed into the cavity of the uterus, showing that there is no actual obstruction in the cervical canal. The late Dr. Matthews Duncan used only to speak of one form of dysmenorrhoea, although he mentions two in his lectures, and Dr. Herman[4] also considers that there is only one form—dysmenorrhoea spasmodica.

It may be here convenient to speak of the ordinary symptoms of dysmenorrhoea. In many cases those women who suffer from it have premonitory symptoms for some days of malaise—slight pain or discomfort in the back, shooting pains, slight or severe, down the thighs, lassitude, disinclination for exertion, abdominal pain, nausea, and headache. These symptoms may last from a few hours to several days, but are only the precursors of the regular pains which occur either before or during the onset, or after the flow has been thoroughly established. The contractions come in waves or paroxysms, and in the most severe form they may affect the bladder and rectum, producing strangury and tenesmus, as well as violent abdominal bearing-down pain. These pains or violent contractions are the same in character as labour pains, and last from one to two or three minutes. There is no regularity, except, as a rule, in the individual herself, in these symptoms. Each case must be judged by itself, for although most can be grouped into those commencing in a certain manner, none are exactly alike. I have divided the cases coming under my observation into slight, severe, and agonizing. In the divisions I have made, those coming under the head of "agonizing" are not common. The word ought only to be applied to those cases actually suffering agony. By these I mean where the woman is evidently in the most excruciating pain—where she cannot keep still for an instant, but rolls about the bed, is covered with perspiration, becomes cold, and, finally, faints from the pain. Of such I have seen a fair number, and only recently a case on which I operated became collapsed each month from excessive pain. In another case brought to me some years ago, a lady about 24 years of age, maniacal excitement developed every month, and the patient was obliged to be provided with two nurses, and invariably became collapsed. In her case complete relief was obtained by dilatation, and she never had any trouble afterwards. Sometimes the usual monthly attack comes on quite suddenly. It is very common for a girl to be awakened by abdominal pain, which increases in severity until it reaches the height to which she is accustomed, when it remains the usual time, and then gradually disappears. When the pain increases in severity, nausea is induced, and very often vomiting follows, in some cases frequent, in some infrequent. I have known persistent vomiting brought on regularly by dysmenorrhoea, lasting for some hours or days, and leaving the patient weak and ill, so that many days passed before regaining strength, again to be reduced by the next attack. In the most severe form I have never known pain to last more than a few hours, but there may be considerable clonic spasms for twenty-four hours or more. A fair estimate may be gained of the severity of the attack by asking the patient if she can fulfil her social or other duties during the time of menstruation. A patient will often talk of "agony of pain," and on further questioning one can ascertain that she will be able to attend a ball or fulfil some engagement which gives pleasure, when it may certainly be said that she does not suffer severely. I invariably ascertain if a patient can keep her engagements during the period of pain. If she cannot, it may be fairly assumed that she suffers. Sometimes there is a sensitive condition of the skin from reflected pain in the region supplied by the sensory nerves from the eleventh dorsal to the second lumbar segments of the spinal cord.

It may here be well to say a few words about the extraordinary difference there is among girls and women of all classes in bearing pain. Some girls, accustomed to every care and luxury, retire to bed every month, saying they have great pain, when, if they were carefully watched, it would be evident that they were not suffering severely. On the other hand, I have known women who have been obliged to make their living, keep at their work unless prevented by actual sickness or faintness from doing so, notwithstanding intense suffering. The test I have for examination in hospital is whether a patient can remain at work during the time of the period. If she cannot it means sick leave, and, after a short time, loss of situation, so that she is driven to the hospital for radical treatment. Doubtless many women, suffering severely, will continue to do their regular work without interruption, but if actual vomiting or faintness be brought on they are obliged to desist.

Some writers divide the symptoms into "uterine" when there is pain in the back with other symptoms supposed to have special reference to the uterus, and "ovarian" when the pain is particularly referred to one or both ovarian regions. Many women complain much more of pain in one or the other side of the abdomen, or in the hypogastric region only, and may not suffer particularly from pain in the back or down the thighs, but I do not regard any refinement of symptoms as necessary. Generally speaking, the pain is pelvic, and, although it would be easy to tabulate a certain number as suffering from sacrache, and others as complaining mostly of aching and pain down the thighs, I do not consider that any useful object is to be attained.

I do not think I need take much time in discussing the diagnosis of the disease. It is so common, and the patient herself is so accustomed usually to the recurring condition that a mistake can hardly be made. Nevertheless, it is well to bear in mind that other conditions may occur at the same time, and possibly be overlooked. Although there may be in some cases of dysmenorrhoea extreme tenderness all over the abdomen, it is hardly likely to be confounded with peritonitis. Absence of any rise of temperature, the characteristic pulse, and the usual symptoms associated with peritonitis, are sufficient for the diagnosis. The cases in which the friends or the patients themselves may be alarmed and in doubt are those in which, although severe dysmenorrhoea is regular, yet for some reason the attack may be intensified and medical advice sought. Under such circumstances, I once saw a patient who was suffering from strangulated hernia, and who was very ill when I saw her. She was operated on successfully. It is well also to bear in mind that in cases of peritonitis absolute rest in the recumbent position is most grateful to the patient, whereas in severe dysmenorrhoea she will not keep still for an instant. In membranous dysmenorrhoea it is not always possible, without a microscopic examination, to say whether the cast is menstrual or not. There are vaginal casts, and decidual, as well as casts of the bladder from inflammation, the former being thrown off in exfoliative vaginitis, and, if this be accompanied by severe pain, it might easily be mistaken for membranous dysmenorrhoea. Of course, it is possible also for the two latter affections to occur together.[5]

Etiology.

I look upon the cause of the pain of dysmenorrhoea as a spasm or cramp of the uterus. Most people know what severe pain may be produced by cramp of the muscles of the calf. The uterine spasm may be tonic or clonic, and I have a theory that when in the severe cases there is a true tonic contraction, it is this which brings about the actual collapse from the severity of the pain. The clonic contractions may continue indefinitely, causing severe pain, but pain which comes and goes, and does not produce the profound impression on the nervous system caused by the tonic contraction. It is important to remember that the painful contractions occur at menstruation, for although

ovulation and menstruation come about the same time, ovulation often follows menstruation, and may occur between menstrual periods. The ovarian changes which precede ovulation, by producing ovarian tension, reflexly excite the uterus and cause menstruation, but may set up much pain before its arrival.[6]

Now what we have to ask is, What can be the cause of these painful uterine contractions? Dysmenorrhoea is a disease, and must have a cause for its production. Many are ready to give various explanations; I confess I know nothing at the present moment which can be accepted as the true explanation of this painful contraction. The most common explanation is the "obstructive dysmenorrhoea" or mechanical theory, to which I have already referred; and if the textbooks are consulted they will be found to give this theory, and to explain it by saying that there is anteflexion which obstructs menstrual flow. It has been suggested that, as the result of anteflexion and consequent obstruction, a little blood is forced through the Fallopian tubes every month into the peritoneal cavity, giving rise to miniature haematocele. These small haemorrhages are considered by some to be the cause of the posterior perimetritis which sometimes accompanies anteflexion.[7] As I have already said, I do not accept this theory of obstruction, for I do not believe, however acute the anteflexion may be, that the flow is hindered sufficiently to influence the uterus in producing pain. The most striking argument to be adduced in support of this is haematocolpos, where we know that there is a complete blocking of the exit from the uterus, and yet no pain in some cases is complained of. In addition to this, we know that more than half the cases of dysmenorrhoea come on in women who have not borne children, after the period has been regularly and painlessly established. Again, I have operated in some cases of sterility when only the finest probe could be passed through a pinhole os, and yet no pain has been complained of at menstruation and there was the usual normal amount. No amount of acute anteflexion or retroflexion blocks the canal sufficiently to prevent gradual flow, however slight it may be, from the cervix, and therefore this cannot be considered a sufficient explanation of the pain at the period. The average amount of blood lost during menstruation is about 4 oz., and if this is distributed over, say, four days, it gives an average loss of one-third of a drop in every minute, which will not be difficult to pass along any cervical canal.

It is quite easy to make a large number of headings under "general" and "local" causes, uterine or extra-uterine, primary or acquired, but this serves no practical purpose, for we are no further towards an explanation. It is usual to advance chronic metritis, or pelvic congestions, as the cause, but they are no explanation at all. Women suffering from metritis or endometritis are liable to have pain or discomfort increased at the time of the period, for the whole uterus and adnexa become more charged with blood and the tension is raised. It is, therefore, natural that discomfort and pain should be increased, for we know how much tension in the vessels has to do with pain. In all women, as menstruation comes on, there is a rise in vascular tension, as well as a slight rise in temperature, and because in dysmenorrhoea it may be proved that metritis or endometritis, or acute anteflexion or retroflexion, is present, the conclusion is arrived at by some that it is the cause of the pain. The menstruation only aggravates the pain produced by the congestion, with the origin of which menstruation has nothing to do. This applies to all pelvic affections, whether of the uterus, tubes, or ovaries. But this cause, even if it did exist in married women, could not be adduced as a cause in virgins, for I know of no work on pathology which states that endometritis is common in them, whereas we know that dysmenorrhoea is. If it occurs at all, it must be rarely. In membranous dysmenorrhoea it might be that there was probably some obstruction, and that the spasmodic pain was caused by the efforts of the uterus to expel the membrane. The expulsion of the membranes, or complete casts of the inner surface of the uterus, is frequently associated with dysmenorrhoea, as is familiar to all, and indeed it is often the presence of these membranes, or complete casts, which induces a patient to seek medical advice. That they are not the cause of the pain is proved by the knowledge that these casts may be expelled without any pain at all. If certain questions are put with reference to menstruation, it will frequently be found that shreds or membranes are passed quite commonly without the least pain. I have had cases which have come before me only because a complete cast of the inner surface of the uterus has been passed on one occasion, and although the patient has known that she has regularly passed shreds, she has paid no attention to them until alarmed by the presence of the cast.

In membranous dysmenorrhoea much depends upon the period of degeneration in the menstruation, which I need not go into now, but it may be shortly said that the mucous membrane of the uterus exhibits (1) the period of growth in the five days preceding menstruation, characterized by a rapid increase of the stroma, blood vessels, epithelium, etc., of the membrane; (2) four days of menstruation, or period of degeneration, during which capillary haemorrhage takes place, and the epithelium suffers degenerative changes and is cast off more or less; (3) the seven days' period of regeneration, during which the mucous membrane returns to its normal state; (4) the twelve days period of rest, during which the endometrium remains in a quiescent state.[8] Gellheim explains the pain as being caused by dragging on the peritoneum[9]—an explanation which will not suffice in a normal pelvis, but may serve when the mechanism of the dragging process is considered in those cases in which direct or indirect adhesions between the uterus and parietal serosa are found.

According to Dr. Mathes,[10] there is a causal connexion between dysmenorrhoea and enteroptosis. Kermanner says that it is nearer the truth, and consonant with the opinions held by Lennander, to seek the source of dysmenorrhoeic pain not in the uterus but in the pelvic tissues, and in those divisions of it rich in nerves, the sacro-uterine ligament for example. Tobler[11] remarks that as regards the significance of menstrual pain in nulliparae, it is important to ascertain whether it has existed from puberty (primary dysmenorrhoea) or whether it has developed later (secondary dysmenorrhoea), the latter being more frequent—as much as 58 per cent. Both primary as well as secondary dysmenorrhoea are found with extraordinary frequency in girls with constitutional affections (chlorosis). He considers it is probable that the most important seat of origin of the pain is just where the most extensive vascular and nervous plexuses are present, namely, in the subperitoneal connective tissue. In this way the kind of dysmenorrhoeic pain, certainly that which is most present in nulliparae, may be attributed to stretching and tearing of the subperitoneal nerves, as has lately been maintained in the case of other pains in the abdominal cavity.

It must be borne in mind that all uterine contractions are not painful. It is now known that there are contractions continually going on in the unimpregnated uterus, and that these are intensified at menstruation. They are sufficient to get rid of blood, degenerated mucous membrane, or complete casts of the uterine cavity, without causing pain, but the contractions with which we have now to deal must be considered to be morbid. In some these contractions are intensified by a small or large fibroid in the wall of the womb, or by a polypus in the cavity setting up irritation, and acting as a foreign body. It is most important to remember that if a woman who has menstruated regularly and naturally for many years seeks advice because of increasing dysmenorrhoea, it is extremely suspicious, and at once a fibroid or a polypus must be thought of as the cause. This is one of those affections classed under "obstructive dysmenorrhoea," but, as already pointed out, in my view it ought not to be so spoken of. All who are in the habit of seeing many cases of dysmenorrhoea have doubtless some theory to account for these morbid contractions. Herman,[12] whose writings are always admirably clear, says that his theory is "that dysmenorrhoea exists because the centres in the spinal cord or in the sympathetic system which regulate the movements of the genital canal are imperfectly developed." In the normal painless menstruation there are contractions of the body of the uterus and dilatation of the cervix, so that the menstrual fluid is expelled without pain or difficulty. His theory is that in dysmenorrhoea this natural dilatation of the cervix is absent, and in consequence the contractions of the uterine body are morbidly violent and painful. I agree with Herman in

thinking that the pain of dysmenorrhoea is caused by painful contractions of the body of the uterus, and that the dilatation of the cervix which normally ought to take place does not occur, but I do not think that his theory can be altogether accepted, although it is nearly right, for otherwise, I do not believe that the disease could be cured by dilatation, or the relief would be so temporary, that constant dilatation would have to be undertaken because of the undeveloped nerve centre. But the strongest argument against it is that dysmenorrhoea may be induced or occur long after the flow has been regularly and painlessly established—what has been called by some secondary dysmenorrhoea, in contradistinction to primary dysmenorrhoea, beginning with the onset of menstruation, and about this I shall speak later; but I may here say that if the spinal centre were imperfectly developed, then the onset of the flow must be painful, and continue to be so, but we know that this is not always the case, and that the most severe cases of dysmenorrhoea may have remissions. If the imperfectly developed centres became gradually developed, and the dysmenorrhoea ceased, then it would be difficult to explain why there should be a recurrence of the pain. My own theory of this disease is that it is caused by the circulation in the blood of some bio-chemical material acting on the hyperaesthetic mucous membrane of the uterus, and possibly also upon the nerve centres regulating the genital canal, and that this material is due to faulty secretions of the ovaries. My ground for this is that, if any ordinary healthy woman is examined with a uterine sound, directly it passes into the region of the internal os and beyond she complains of discomfort, or at any rate it is disagreeable to have the mucous membrane, which is normally very sensitive, touched, but she can bear the examination perfectly well. Now, if you examine a woman who suffers from dysmenorrhoea with a probe, directly it passes into the internal os she will say that it is extremely painful, and, if you continue to introduce the probe so that it touches the uterine mucous membrane, the patient may declare that it is intolerable. Now afterwards, on withdrawal of the sound, she will say that the pain she complains of is exactly the same as at the time of the period, and this same kind of pain may continue for some time after the examination. The touching of the mucous membrane by the sound produces apparently a reflex action, and a painful contraction of the uterus ensues. Anything which acts as a foreign body will do the same, and this, in my opinion, is the explanation of the painful contraction in membranous dysmenorrhoea—the shreds or casts irritate the hyperaesthetic mucous membrane. It seems to me that, as the onset of menstruation occurs and an increased secretion commences, which is sufficient, in a condition of hyperaesthesia, to irritate the mucous membrane in such a manner that reflex painful contractions occur, these spasms continue until the mucous membrane becomes adapted to the continued irritation; or, in other words, until the irritability of the uterus is exhausted and pain no longer occurs, or the source of irritation in the circulation is no longer present, when the reflex action ceases. As in this disease there is this irritable mucous membrane, which is the only part we know must be morbidly affected, it seems reasonable to assume that in some way it accounts for the spasm of the uterus.

It is not, however, easy to explain what causes these changes of the mucous membrane to bring about this hyperaesthesia—whether the irritation is due to some secretion or altered blood it is impossible to say. We know from Gautier and Douser[13] that menstrual discharge contains four times as much iodine as normal blood, and an amount of arsenic equal to the whole quantity normally present in the thyroid gland.[14] It is, therefore, possible that this is sufficiently irritating to act on the hyperaesthetic mucous membrane. But, in any case, there evidently seems to be an irritant which, acting on a morbidly hyperaesthetic mucous membrane, or directly on the nerve centres, produces painful contractions of the womb. Matthews Duncan likened this disease to spasmodic asthma, where there is also doubtless a hyperaesthetic mucous membrane, in this case of the bronchial tubes, difficult of explanation.

It is well known that at the onset of the period there is an alteration of the blood pressure. After rising, it falls slowly, the minimum being coincident with the appearance of the flow.[15] This may be due to the action of the ovarian secretion influencing the spinal centre for the genital canal or region and vasomotor areas. It is possible that this ovarian secretion, which undoubtedly has a powerful influence on the blood, may, under certain conditions of health, contain an irritating material which acts on the mucous membrane of the uterus. When the amount or properties of the ovarian juice or secretion is absolutely normal no alteration takes place in the regular menstruation, but when it contains some abnormal constituent, or its elements are not duly proportioned, then the action on the blood causes the secretion preceding menstruation to irritate the uterine mucous membrane, and give rise to the reflex action leading to painful contraction. It is probable that in time we shall know more of the functions of this ovarian secretion, but at present we can only theorize as to its possibilities. It certainly seems reasonable to believe that the proper action of the ovaries and their secretion must have everything to do with menstruation being carried on in a perfectly normal manner. We now know that upon the equilibrium of the blood glands depends our health; and as our knowledge becomes extended, we may hope to ascertain exactly the action of the ovarian secretion.

Fellner says[16] that the uterus secretes internally, that this secretion forms a part of those toxins which affect the increase in the wave, so that the ovary becomes poisoned, and that between secretion and organs a relationship of dependence exists. That ovarian secretion is discharged is supported by the fact that calcium is secreted by the uterus,[17] and, on the other hand, that the functional activity of the ovary proceeds concurrently with the excretion of calcium. Riebold[18] considers that, concurrently with the strictly periodical fulfilment of the process of ovulation, certain secretions obtain access to the circulation. These, under physiological conditions, cause, first, an increase in nervous and psychic irritation, and secondly, an increase in the blood pressure and vital energy, the general heightening of the process of metabolism, and consequently the more generally severe hyperaemization of the internal organs, and a more active secretion of fluids. These processes may be set up independently of uterine haemorrhage. He mentions what he calls "recurrent rheumatoid ovulation fever" occurring in young girls, accompanied by more or less severe disturbance of the general condition, at the time of menstruation. He considers that ovulation has the effect of storing up an infective focus of rheumatic material, present in the body but latent, or else that a functional defect of the secretory activity of the ovaries may underlie a diseased condition.

There is another explanation of what is termed by some "ovarian dysmenorrhoea," when all the pain seems to be limited to one or the other ovarian region or to both, and there is sometimes a thickened capsule of the ovary found, with small cysts in the ovary itself, or it may be a tuberculous ovary. It seems that as the increased congestion takes place during menstruation, the ovary swells, the capsule becomes tightened, and great neuralgic pain is set up owing to tension and compression of nerves. This pathological condition is certainly found in some cases of dysmenorrhoea, but is not the cause of the real painful contractions—the spasmodic dysmenorrhoea of which I speak. I believe, when this pathological condition exists in the ovary, there is often severe neuralgic pain, lasting many hours, but it is not of the character of that which we have been discussing as spasmodic dysmenorrhoea, although of course it may be associated with it.

With spasm or intense contraction, all the muscular fibres squeeze the nerves supplying the uterus, and so cause pain. In some cases it is possible that actual neuritis of some of the nerves may take place, leading to continued discomfort in the region of the womb long after the period is over, and Lawson Tait believed that there are nerves from the tubes to the sympathetic system, and these he called "menstruating nerves." It is probable that the continued contraction of the uterus causes a slight amount of hypertrophy of muscular tissue; at any rate, the cavity tends to become elongated. In nearly all cases of well-marked dysmenorrhoea on which I have operated, the sound measured an increase of ¼ in. to ½ in. This enlargement is more likely to be due to repeated severe contractions of the uterine muscular tissue than to anything else, and is analogous to the ordinary hypertrophy of muscular tissue

from overuse. I do not believe that a small uterus—the so-called infantile uterus—has anything to do with dysmenorrhoea. No doubt it is frequently associated with dysmenorrhoea, but I believe that the cause of dysmenorrhoea is exactly the same as in patients with a normally developed uterus, and the actual ill-developed uterus follows the same laws in this disease as the well-developed one. I have so frequently found hypertrophy associated with this disease that I cannot agree with Theilhaber's theory that the pain is due to a badly-developed uterine muscle.

Prophylaxis.

I have seen enough to know that there are many girls suffering from severe dysmenorrhoea who have started the period in an ordinary painless manner, who have been quite healthy, and who have developed dysmenorrhoea apparently from causes which might have been averted. I could relate many cases bearing on this, but I need only mention one in illustration of what I mean. A young lady, aged 23, was brought to me on account of dysmenorrhoea, dating from about a year before. She commenced her period at 13, and was always regular, suffering no pain, and never being troubled in any way by it. She was staying at a country house in Scotland, and on the first morning of her period started a drive of four hours in an open dogcart. Rain fell, and continued heavily during her drive; she was soon cold and wet, and told me that for more than two hours she was sitting in a pool of water. Pain came on within a few hours, and this attack was followed by regular and severe dysmenorrhoea. This case alone shows that dysmenorrhoea may be induced, and I have had many similar severe cases brought on by cold travelling. It is only prudent to advise girls to be careful of themselves without making any fuss at the time of the period. I see no reason to advise a healthy girl to remain in bed for the first day, but I know that many brought up in luxury are made by their mothers to do so. If a girl is really healthy, beyond giving directions for sensible care at the time of the period, nothing more need be done. It is a mistake to educate healthy girls to the belief that it is necessary to look upon the period as an illness. There are unfortunately only too many who are really delicate, and who are obliged to look upon themselves as invalids for so many days of every month, but those who do not suffer, and who enjoy good health, may go about their lives as usual, merely taking care to avoid any violent exercise. It is also important to avoid, if possible, passive chill, and for girls to remember to clothe warmly during cold weather.

One other cause which I believe will induce dysmenorrhoea in those who have not previously suffered from it is overfatigue, often most difficult to avoid, but cold and overfatigue together are, in my opinion, a fertile cause of the onset of dysmenorrhoea. If a girl who has a good family history, who has health to start with, lives an ordinary healthy life, with plenty of fresh air, attending to hygienic laws, she apparently ought not to become subject to dysmenorrhoea. About this, however, strangely enough, nothing positive can be said, for sometimes the most healthy looking girls gradually develop dysmenorrhoea, and others who are delicate, anaemic, and feeble, pass through each period without any trouble. It is impossible to forecast the future menstrual history of any girl who is commencing womanhood, however well she may be at the onset. I have very frequently observed that there is a family history of dysmenorrhoea for several generations. In ordinary slight cases of this disease, where a girl is complaining of malaise and headache, with only a little pain, rest and warmth will probably be sufficient. The application of dry heat in the form of hot-water bottles, and simple hot drink will probably be all that is required for relief. As to the drink, it may be hot barley water, milk and water, or the old-fashioned mulled wine, or hot spirit and water. In the slight cases hot fluid is sufficient, whatever it may be, and the addition of alcohol is unnecessary, especially if the patient is not in the habit of taking any. If the pain is not rapidly overcome by this, then some ordinary analgesic medicine may be given.

Treatment.

In the severe cases the patient does not need to be asked to go to bed, for, as a rule, she must be there. In some cases I have already referred to, in which, although the pain is very severe, it is not sufficient to cause sickness or faintness, the patient may be able to keep about. This entirely depends upon the nervous system of the individual and the power of self-control. As a rule, it is impossible to keep about during the whole time, and retirement for an hour or two at least is necessary. In such cases the pain may be overcome by immediate treatment. As soon as the first indication of pain occurs, if it be by day, and it is possible to do so, a hot sitz bath, of ten or fifteen minutes' duration often gives great relief. An ordinary hot bath is of no use; the patient must immerse the middle of the body in the bath, the legs and upper part of the body being still covered. It is best to add hot water as the water cools, so that the temperature is kept up, and the patient may have it as hot as she can comfortably bear it. After this, if she is put into a well-warmed bed, with an india-rubber hot-water bottle to the back, and one on the abdomen, great comfort will be given. It is of importance to let the patient lie on a hot-water bottle, because there is usually so much sacral pain, and the dry heat affords immense relief. Sometimes the abdomen is so tender that the hot-water bottles cannot be borne. In these cases I advise a very thick layer of wool, which has previously been baked in the oven until quite hot (this can be done in an ordinary tin box), to be applied all over the abdomen, sometimes sprinkled with laudanum. It is light and can be easily borne. If the abdomen is very tender, the application of equal parts of liniment of aconite and liniment of belladonna is particularly soothing, combined with the heat. At the same time I order a teaspoonful in a wineglassful of water of granular effervescing phenacetin, containing either 5 or 10 grains to the drachm, according to the severity of the pain. If not better in twenty minutes, this is to be repeated with 1 drachm of brandy, and if in another twenty minutes relief does not come I give a third dose, with another drachm of brandy. The pain is usually relieved after two or three doses. It is best to give a little alcohol with the phenacetin to prevent the depressing effects on the heart. Should it be necessary, a dose can be given every four hours after the second or third doses have been given.

In a certain number of cases vomiting comes on early with the pain, and whatever is ordered may be rejected. It is usually better to order the effervescing mixture wherever there is a tendency to nausea or sickness, as it seems to be more easily borne, but some may prefer it in the form of cachet or powder. Should vomiting be frequent, mustard to the epigastrium may be applied, often with good results. It is well to bear in mind that when the pain is soothed and vomiting has ceased the patient should not be allowed to get up, or make any effort too soon, or the pain and nausea or sickness may recur immediately on exertion. Should no vomiting or nausea be present, nourishment in some easily digested form should be given during the period of pain. Sometimes, if the pain comes on before the flow, much relief may be obtained by a pint of hot saline solution given per rectum with 30 or 40 grains of bromide of sodium or ammonium added; it must be retained to be of service. There are certain cases in which this seems to answer well, but if relief can be obtained by other means I prefer them. A hot saline injection with a fair dose of phenacetin may be given if the patient is too sick to take anything by the mouth. Fifteen grains may be given, and repeated later should it be necessary, but brandy ought to be given mixed with the injection to counteract the depressing effects of the phenacetin.

The old-fashioned foot-bath, with a little mustard, is often invaluable in certain cases. Emmett recommended in addition a hot mustard plaster about 3 in. in width, reaching from the cervical region of the spine to the sacrum,[19] and also dry-cupping when the flow is delayed, which I have seen give great relief.

For the agonizing form, if large doses of phenacetin or such-like drugs do not afford relief, the only remedy is morphine hypodermically. Fortunately these cases are rare, and recourse to large doses of morphine is unnecessary, but it is well always to remember the danger of giving morphine to a patient suffering from dysmenorrhoea, for the habit of taking morphine is easily established, and as the pain recurs every month, the temptation to increase the dose is ever present. In giving it for these

most severe cases it is better to combine it with atropine, to avoid the risk of sickness. For phenacetin may be substituted aspirin, antipyrin, antifebrin, novaspirin, castor, chloretone, or any similar drug, and occasionally amyl nitrite or nitroglycerine, but it must be remembered that all these drugs only soothe the pain and tide over the attack. What we have to study is the cure of the disease, and none of the drugs I have named will do this. Unfortunately, this disease has no tendency to become cured without treatment. We must endeavour to find a drug which will so act as to prevent the onset of this severe pain, or at any rate greatly mitigate it, so that when the period occurs the patient will not suffer much. One of the drugs most commonly used is guaiacum; the late Dr. Matthews Duncan, with whom I often discussed this affection, placed it before everything; and Dr. Herman speaks well of it. It is no doubt often excellent, and it is best given at least a week before the period is due, in doses of 10 grains three times a day. I have not found it of as much service as tannate of cannabin, which, in my experience, seems to have done more good than anything I have tried. I give it in the form of a pill three times a day after meals, for seven days before the period is expected. It may be given in doses of from 2 to 3 or 4 grains, and, if preferred, may be continued through the period in increased doses. I usually stop it when the pain comes on, if at all bad, and give one of the coal-tar analgesic remedies, but if the pain is not severe the tannate of cannabin may be continued until all chance of recurrence of the pain has disappeared. With it I frequently give ovarian substance. The treatment ought to be continued for some months before discarding it. The only disagreeable symptom I have known, and that has been quite rare, has been a certain amount of looseness of the bowels, which has made it necessary to stop the drug, but this is the only point worth mentioning about its administration. I used cannabis indica for a considerable time, and although it was often of great service, I frequently found that it produced a mild form of delirium or excitement, and as this was sometimes alarming to the friends I gave it up, and now never use it. Bromides are often of great service, but they ought to be commenced some time before the onset of the period, and are apt to cause in some patients a certain amount of depression. Amongst other drugs, I have often found viburnum prunifolium of service, as well as sodium salicylate. It would be useless to enumerate all the drugs which have been advocated in the treatment of this disease. I have had better results from the use of cannabin tannate than from any other drug. I believe it acts, as all drugs which benefit do, by soothing the hyperaesthetic mucous membrane.

I must merely mention the treatment by Fleiss of the application of cocaine to the "sexual spots" on the nasal mucous membrane. In a paper by Dr. Koblanck[20] on nasal reflexes, he advocates the application of cocaine to the so-called sexual spots in the nasal mucous membrane in some forms of dysmenorrhoea. I will not discuss this treatment, for I have had no experience of its use. Kolischer[21] attributes good results to suggestion.

In many cases I have certainly done good by the administration of ovarian substance, and I have found that when used with girls who appeared anaemic, it answered well when combined with iron or arsenic. It may be that my theory of the disease explains its action. The administration of ovarian substance must be watched, for sometimes it causes nausea. I usually give tablets of 5 grains (containing 0.32 gram) two or three times a day after food.

Before passing to operative measures, I must refer to Boult's[22] opinion that there is an antagonism between the physiological function of the ovary and mammary gland, and that menstruation is to be conceived of as a process which is set going by the biological power of the ovary. He has attempted to overcome the intensity of the pathological conditions of menstruation, and above all of dysmenorrhoea, by artificial stimulation of the mammary gland. He has employed a breast pump, and has produced, some days before menstruation and during it, engorgement of the mammary gland. He states that he has seen good results follow this treatment, both in the abatement of the pain and in the diminution of the flow of blood.

Surgical or operative treatment may be briefly divided into dilatation of the cervix and removal of the ovaries—the latter not to be undertaken without the most serious consideration. Now dilatation is, on the whole, a most successful operation, and all those who have had special experience in the treatment of this disease are favourably impressed by the results. It imitates Nature's cure, which is pregnancy, for then thorough dilatation of the cervix is secured; but unfortunately we know that dysmenorrhoea is frequently associated with sterility, so that this natural cure is often denied the patient. Some prefer to incise the os laterally before dilating, or to cut out a wedge-shaped piece from the cervix all round the canal.[23] Others divide the cervix, stitching back the angles, so as to ensure their remaining permanently patent. In my own practice, I hardly ever incise the cervix. It need only be done at the time of dilating if the os is extremely small. Incision of the internal os, which involves unnecessary risk, is practically never done now. It used to be much in vogue, and gave relief probably by dividing the circular fibres and giving them rest from spasm. This object is, of course, gained by slow dilatation of the cervix. As a rule, I use the ordinary Hegar's metal dilators, and do the operation at once under an anaesthetic. If the patient has no time to devote to rest afterwards, it is better not to do it at all.

The operation of dilatation should be accompanied by the same precautions as any other surgical operation. There ought to be no such thing as a minor operation in surgery, because every operation undertaken ought to be carried out with scrupulous care. After thorough dilatation it is best to keep the patient warm in bed for a few days. Some advocate the use of electricity in the treatment of dysmenorrhoea,[24] or the intrauterine application of the galvanic current,[25] and by others the stem pessary is lauded. I have used neither, and I do not advise the use of the stem pessary, for it cannot be altogether free from risk. It may be that I am prejudiced against it on account of the unfortunate results I have seen from its use. In cases of dysmenorrhoea, where there is continued pain over one or both ovarian regions, it is found sometimes on opening the abdomen—the operation being possibly undertaken for something else—that the ovaries have small cysts all over them. If these cysts be punctured and the fluid allowed to run out, the ovarian pain will sometimes disappear, because presumably the tension is relieved. When intense pain over one ovary, or both, is invariably complained of at the onset of or during each menstruation—pain sufficient to incapacitate and prevent the patient from making her living—it may be justifiable to explore. In certain cases the ovary may be found to be cystic, as above mentioned, and in some cases I have seen adhesions from previous local peritonitis. If these are thoroughly broken down without doing anything further, the patient may be cured.

I believe some resort to gradual dilatation—that is, passing a dilator increasing in size every two or three days until the full size is reached. I do not recommend this proceeding. It is tedious and somewhat risky, and certainly very painful. I have known parametritis to follow in the practice of more than one who passed the dilators in his own house. It is best to operate under an anaesthetic, and to pass each dilator slowly, so that the cervix may be slowly and steadily dilated and not torn. My own experience is that if the dilators pass with considerable difficulty, there is a much better prospect of a cure than if they enter the cervix easily.

And, finally, there is oöphorectomy. This is a matter upon which the patient, and she alone, ought to be the judge. It must, of course, be most strongly condemned unless done only after the most serious consideration. If the woman is of a certain age, shattered in health, with no prospect of relief in spite of all kinds of treatment, and if she is willing to relinquish the chance of child bearing, then I think that her request for the operation which will stop menstruation and cure her pain ought to be attended to. I would say this, however, that her statements as to her sufferings ought to be corroborated by the relations or friends with whom she lives. No one would undertake this operation without feeling satisfied that the patient had had everything for and against placed before her; and, above all, it is essential that absolute certainty should prevail as to the diagnosis of the disease.

I have already referred to dysmenorrhoea and the cure of neurasthenic patients. Be certain, before undertaking an operation of this kind, that the patient is really suffering from genuine spasmodic dysmenorrhoea, and that she is not a neurotic woman, with pain intensified at the time of menstruation.

In conclusion, I would say with much regret that I do not consider we know any more about dysmenorrhoea which will enable us to speak positively as to its etiology or pathology than we did years ago, but I cannot help feeling that further observations concerning the secretions of the ovary may open up a wide field of knowledge. The exact relation between the ovary, the thyroid, and the other ductless glands is still obscure,[26] but we must earnestly hope that the time is not far distant when we shall be enabled to speak positively about the action of their important secretions, and that a true explanation of the occurrence of dysmenorrhoea may be forthcoming.

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SOME CONSIDERATIONS BEARING ON THE SURGEON, THE PATIENT, THE STUDENT, AND THE NURSE,

BASED LARGELY ON THE PERSONAL EXPERIENCES OF THE WRITER*

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I PROPOSE to do this evening what I think is entirely new in this society, to present a paper based on the writer's own experiences as a patient. In doing so I am aware that I am taking some risks, but I know most of the members of the society well, and I believe I shall be accorded the same kind consideration as has always been shown me during the twenty-five years that I have been enrolled among its members. It is not altogether pleasant to have to confess to such a record of physical weakness as I must lay before you; but these experiences, with all the pain and misery associated with them, have taught me so much and produced such deep convictions with a practical bearing that did I not speak I would feel almost guilty of being untrue to myself and to my past as you know me.

I could fill a volume with views based on new conceptions of physiology and another similar one bearing on psychology. Indeed, that I can claim your attention for only a short time on one evening is the chief difficulty under which I labour; for I fear that, in merely touching on subjects that to be adequately understood would require deliberate attention and illustration, I may fail altogether in making my meaning clear. But so many are now anxious to get the ear of the society, and this is so healthy a state of things, that however deeply I may feel the practical importance of some of my views, I must not claim from you more than a little extra time and patience.

Life to be healthy should, in a human being, be made up of reflection and action. The medical man is apt to neglect the former by reason of the numerous calls made upon him; but he himself, and his profession and the public, suffer from this. Action should be based on knowledge. What was once good practice is so no longer because of the increase of knowledge. But so-called knowledge is of very varying degrees of completeness and value. Much that passes as knowledge and even suffices in a fashion for practical life, is worth little in the development of the individual's nature. A man from viewing and handling apples may have what suffices for commercial purposes fairly well, but if he has never tasted an apple his knowledge is of little real value as judged by an educational standard; and no amount of the most graphic description can give a knowledge of an apple that one bite of it will communicate.

To him that has never felt real pain a description of a toothache is mere sound signifying nothing. The man who has been absolutely healthy and vigorous all his life—that is, beastly healthy—is also beastly narrow and ignorant as regards many of those higher things the comprehension of which makes us peculiarly human, such as not a little in literature and art, even much of psychology and philosophy; in a word, much of life in its breadth and depth. The only highest knowledge is realization. A grain of realization is educationally worth a ton of other kinds of knowledge, for it alone is the key that unlocks the real secrets of life. There is no such enviable quality as that which helps one human being to put himself in the place of another. We are born with very varying degrees of capacity to do this. To all, however endowed by Nature, some experience of life's joys and sorrows alike, including physical ills, is necessary; and I am now convinced that most men have much less ability to put themselves in the place of others than they suppose.

When you hear my history as a patient during the past year, I think you will admit that I have some special qualifications to speak on certain matters. On the subject of pain and misery generally you may be ready to admit that I have graduated to the rank of an authority. But it might not occur to you to think that on other subjects, in fields that fall little under the ken of the so-called average man or even average doctor, there has come general enlightenment. On such dark subjects as dreams, obsessions, delusions, illusions, the importance of the fundamental conceptions of time and space, hypnosis, the subconscious, and many others, the world is a new world to me. This enlightenment has not only served to emphasize the ignorance of most of us, but to make me feel how little I even yet understand some of the states of my fellow men. I believe that even those long associated with the insane do in any true sense understand them but very imperfectly.

I have been dealing in abstract statements, perhaps some of them almost truisms, yet truisms of a practical importance that is very imperfectly realized. Before passing on to give the history of my case, allow me to put in a few brief sentences some of the conclusions to which I have been led, based on my past experience as illuminated and largely interpreted by my more recent knowledge gained through so-called misfortune, but which is only so when regarded from the narrower point of view. I shall now keep largely to those convictions which have a practical bearing.

NOTE.—It should, perhaps, be stated that the writer of this paper began his medical career as the interne and medical superintendent of a general hospital, where for more than two years he had a rather wide range of experience; that, after spending considerable time in study and investigation abroad, he entered on private practice as a general practitioner, but soon became a specialist. In about two years he laid aside medical practice to enter on the career of a physiologist, which he took up in 1884. During the intervening period he has, however, frequently attended medical clinics abroad, in addition to working in scientific laboratories, and has always been an active member and regular attendant of the Montreal Medico-Chirurgical Society; so that there has been no period since his graduation when he was not in touch with practical medicine to a greater or less degree.

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1. Realization is the highest kind of knowledge. Most men are to some extent handicapped in the practice of the medical profession by a lack of experiences of the sort which fall to their patients. Development and the highest preparation for action come from the mind that has felt sorrows and pain as well as joy. Much of what is best in art and literature—that is, much of the best teachings of the world—has come to it from the men of sorrows. The greatest musical symphony ever written, expressing as no words can the joy and the sorrow of life, sprung from the mind and heart of a man of many griefs—the unrivalled Beethoven.

2. The medical education of the day is defective in two respects: (*a*) The student is graduated without certain realizations he might have, and (*b*) without a certain kind of practical knowledge all who practise medicine require. In my opinion a medical man in starting on his career should not only *know* all a nurse does and a great deal more, but be able to *do* all that she can do; and as about 90 per cent. at least of any graduating class are to be general practitioners, and not teachers or employed in scientific research, I would, if necessary, take the time required to give them, when students, a practical knowledge of all that is now required of a well-trained nurse from the time now given to anatomy, physiology, chemistry, pathology, etc.

3. Pain and the misery associated with profound shock are such great evils that they call for special consideration. When a patient is confined to bed his comfort in every respect should receive attention, for it is not only important to get the surgeon's wound healed, but to keep the patient from misery while it is being healed. A life filled with suffering in any form is not in itself worth living, from which certain conclusions follow as regards both nurses and doctors. A nurse who is merely a surgeon's assistant or dresser, as I have by personal experience found some to be, fails greatly in her duty; and the surgeon who never had certain experiences, as, for example, in passing a catheter on himself, can scarcely be considered adequately fitted for his work.

4. Shock is so little understood, so widespread, and so great a source of danger and misery, that the study of its nature, prevention, and treatment should still further engage the attention of the whole profession. I scarcely know any subject so urgently deserving the attention of the profession.

5. Many in the nursing profession are ill adapted to it, while we fail to attract to its ranks many women who would be invaluable, but who seek other avocations. The fundamental remedy is to make the profession more important and honourable in the eyes of the public.

6. Our medical students should be made to realize the importance of the administration of an anaesthetic. They should be trained in producing anaesthesia, general and local, by experts. Much of the administration of anaesthetics on the American continent, as compared with that in England as carried out by professional experts who give their whole time to this, seems to me in comparison barbarous. Is it not time that we encouraged the formation of a somewhat similar class in the profession on this side of the water?

These are a few of the subjects on which, after my trying experiences, I feel very deeply.

Now to give you a very brief history of my case, not for discussion in detail, as my operating surgeon is not present, but rather to indicate to you on what special personal experiences I base the conclusions I lay before you.

The profession is, I am inclined to think, perhaps almost unconsciously to itself, entering on a new epoch—one in which the psychological manifestations in the patient will receive possibly as much attention as the physical, and in some cases more. We are beginning to pass from a condition when as a profession the psychological has been either ignored or treated in the most empirical way. Yet the day has never been when the really great physician ignored the mind. He has been, consciously or unconsciously, given to minister not only to the mind diseased, but to the mind in the diseased subject. We are beginning, however, to recognize that this is not enough, but that psychological science must be applied with all the skill possible in dealing with every patient, because the body is greatly influenced by the mind, and because all sense either of pain or well-being is finally a matter of the mind.

Having for some years advocated the introduction of the study of psychology into the medical curriculum, you will be prepared for the importance I attach to noting psychological conditions in myself during all the stages of my illness. Only those who realize two things can possibly understand much that lies deep among my convictions. I believe (1) that the only real possession is appreciation. I may own a beautiful picture, a work of the highest art, but if you appreciate that picture in the sense of feeling its real worth more than I do, this treasure is yours rather than mine. And (2) that pain, when it passes beyond the degree when it serves as a warning, is an unmitigated evil.

It follows that life is valuable to any individual in proportion as his consciousness is free from pain or uneasiness on the one hand, and on the other filled with appreciations—the more numerous and the deeper the better.

Perhaps no one has made so clear a law of compensation that seems to exist in the universe as Emerson. There is no situation that is utterly bad—that is, wholly without compensation. This, however, is only true if we take life as a whole, and believe that existence is continued beyond this present time and state.

Perhaps the best service I can do is to try to show what have been some of the compensations—some of the many—that went with the various stages of experience that fell to my lot last year. These advantages or compensations consisted of new or clearer views on a variety of subjects, a large proportion of which would have been impossible to me apart from my so-called misfortunes. I propose, then, now to give a very brief history of my case, noting some of the compensations associated with each stage of its development.

HISTORY OF THE CASE.

First Stage.

The previous history of the patient was good; he had had only one serious illness (in youth) in the form of bronchitis. For some years micturition had been rather too frequent, especially at night. An acute condition, marked by irritation and very frequent micturition, began early in June, 1908. This was attributed by the patient to an exacerbation, owing to catching cold, of a condition supposed by him to be a hereditary sensitiveness of the bladder. The heredity, as regards the bladder especially, had led to the condition in question, in spite of the patient having lived soberly and physiologically righteously in this present world. The diagnosis of enlarged prostate was made and palliative treatment recommended. As there was at times retention to the extent of over 30 oz. the gravity of the situation can be understood. Catheterization with a soft rubber instrument was carried out, two and sometimes three times daily for a month, the result being relief of urgent symptoms; but there remained residual urine to the extent of 18 to 20 oz.

Operation had been hinted at more than once. The patient learned self-catheterization, and, hoping for further improvement, sailed on July 16th for England. The voyage was very disagreeable, and to this rather than lack of care the patient attributes the fact that the bladder became infected and urethral fever set in.

Compensations.—New ideas as to sensations; on the value of mental treatment; and on the selection and training of nurses.

Second Stage.

Consultation with a London general surgeon who was a specialist in urology. He recommended immediate prostatectomy. This operation was carried out suprapubically on August 18th, the anaesthetic being administered by a specialist, and in a manner that surprised the patient, who had inhaled ether once in Canada at the hands of a house-surgeon. The operation was followed by considerable shock. By a misunderstanding the patient was allowed only very small quantities of water after the operation, and suffered greatly from thirst. The wound where the tube for drainage had been inserted was very slow to heal, not completely closing till the thirty-first day after the operation. During the greater part of this period the bladder had been washed out with an antiseptic solution. Throughout the whole history of the case there had been great difficulty at times in introducing a catheter, which was the cause of much suffering—and, in fact, before the first attempts at passing a catheter after the operation were successful, I was again obliged to submit to ether anaesthesia.

On the twenty-sixth day my surgeon was obliged to take a holiday. On the second day of his term his substitute—in fact his house-surgeon—so passed a catheter that I felt as if a lance were being suddenly thrust into me. The same day urethral fever set in and continued till all use of the catheter and irrigation of the bladder were discontinued. During this period the urine had become very foul, but improved when the local treatment was discontinued. My general health was very bad. To this unfortunate period I trace most of the misfortunes that overtook me later. My surgeon on his return recommended change from the nursing home to my own rooms and going into the fresh air. On the thirty-third day I began to sit up on the side of the bed and to learn, like an infant, to walk again. Two months from the date of operation I left for my London home, my general health being rather poor, and the tone of the bladder distinctly bad. I took exercise, and used mental tonics, in the form of reading, attendance at concerts, etc.

Compensations.—This was one of the most fruitful periods to me of all. New light came on such subjects as dreams; the origin, nature, and importance of our conceptions of time and space; the interdependence of body and mind; on the subconscious; the nature of obsessions; the narrowness of our ordinary view of things; the limitations of the healthy man, etc. On the physiological side I was profoundly impressed with the importance of the study of shock; of the avoidance of following the same routine with all patients; of nurses being trained to consider the patient's comfort, and not to be mere surgeons' dressers; of their being trained in regard to anatomy and physiology in a very practical way, so as to understand the question of bodily tension and relaxation involved in turning patients with abdominal wounds, etc. Of the great value to a medical man of sound judgement, of common sense as applied to medicine. I also became profoundly convinced that in America we should better our administration of anaesthetics.

Third Stage.

Although things went fairly well with me the urine never cleared up, and the tone of the bladder remained unsatisfactory. On February 18th, 1909, my condition grew worse; an abscess formed, and pointed at the site of the part of the surgeon's wound last to heal. After a temporary closure of this bladder fistula, it reopened in a few days. The patient was again taken to a nursing home—a new one, in which things generally were managed in a way much more to my mind.

For the third time an anaesthetic was administered, and a gum elastic catheter tied in the bladder. This failing to drain, was replaced by a metal catheter, which was introduced under cocaine, and in this way the bladder was washed out, the whole process, in spite of the use of the local anaesthetic, being very painful. Soon the metallic catheter was tied in, and the patient enjoined to lie constantly on the back, with as little movement as possible, day and night. During the first period the catheter was kept in two days and two nights. The opening closed, but soon reopened. The surgeon was much discouraged, but resolved to try the method once more before resorting to another operation (cutting into the bladder). This second ordeal lasted three days and three nights, and was successful. You can but faintly realize the suffering involved in this. During this time my general health was bad, and the urine markedly abnormal.

After continuous irrigation, sometimes twice and three times a day, there was decided improvement in vesical and general conditions. The patient then learned to irrigate his own bladder through a soft catheter, which soon had to be changed to a gum elastic one. On May 26th, the patient having again learned to walk, returned to his own rooms.

Compensations.—A world of knowledge regarding reflexes; light on the physiology of locomotion; on anaesthesia; pain; hypnosis; and much generally in regard to the relation of mind and body.

The nurses in this home were not merely surgeon's assistants. They all looked carefully to the physical and mental comfort of the patient, though some were more satisfactory in this respect than others. The head nurse, or lady superintendent, presiding over the department of the house in which my room was situated, was an almost ideal woman for the position she occupied. She worked herself with the nurses, and this explains much. It was worth a great deal to know such a woman.

Fourth Stage.

On June 4th an attack of septic epididymitis necessitated my again entering the home. The treatment consisted in rest, local support, counter-irritation, and pressure. The tenderness disappeared speedily, but the parts long remained enlarged, though this was in no sense troublesome. After about three weeks the patient again returned to his own London home.

Fifth Stage: Convalescence.

On the advice of my surgeon I spent the month of August at a seaside resort—Eastbourne. I lived most of the time in the open air. The change acted most favourably, and this I attribute, not only to physical agencies, but also to psychical ones, especially, after being shut up so long, seeing so many human beings, who were young, healthy, and aesthetically attractive. On September 9th I sailed for Montreal.

To summarize the whole case one might put the matter thus: A patient that had been previously very free from disease had for years shown some symptoms of enlarging prostate. He suffered from a bad bladder heredity, which explains the origin of the condition.

After palliative treatment there was prostatectomy. Out of this and subsequent complications there arose a condition of things that resulted in the patient taking an anaesthetic three times; having to learn to walk afresh three times; submitting to unlimited catheterization by means of the three kinds of instruments; much irrigation for an infective cystitis; formation of a bladder abscess and fistula; and being confined to bed at different times for a period amounting in all to about four months—a vast experience full of new light on many things that it is hoped may be helpful to him in this state of existence and those subsequent ones in which he must now more than ever believe.

I would like to add to those already made a few remarks, especially about some matters that seem to me of great practical importance.

My Montreal surgeon who made the diagnosis of enlarged prostate and carried out the palliative treatment was, I am now convinced, persuaded from the first that only operation would remedy the state of things that existed. But I cannot too much admire the tact and fine feeling he showed. All the preliminary treatment by catheterization was valuable, perhaps essential, in bringing the patient to a realization that there was but one remedy, even if that were a radical one not wholly free from danger to life. Had I been told bluntly at the first interview that such an operation must be performed, the mental shock would likely have been serious, and that this experience was spared me makes me grateful to my surgeon. You all know him and you know him not. I must not fail to pay a tribute to his two house-surgeons, who carried out the catheterization with a care, intelligence, skill, and consideration for the patient worthy of all praise. For twenty-eight days these young men catheterized the patient two, and often three, times a day, giving very little pain, and with no appreciable rise of temperature or other bad symptom, and that in a very sensitive subject; while an English house surgeon so passed the catheter on his second visit that typical urethral fever followed on the same day. True the patient then had a certain amount of cystitis and was not in as good general health as before, but does that account for the difference? I think not. The remark of one of the Montreal house-surgeons to the other when handing over the case to him is noteworthy. When asked how often he used the catheter on this patient, his reply was, "Three times a day, and every time with fear and trembling." This, in my opinion, is the only spirit in which any man should ever take a catheter into his hand for use on a new patient, or for use on any occasion with certain subjects. Brilliancy and rapidity in passing this instrument are not to be encouraged. The hands of my house-surgeons in Montreal moved like snails. Would that I could say the same of the substitute of my London surgeon. On one occasion my London surgeon himself must have occupied at least twenty minutes before the catheter could be got into the bladder, and yet no urethral fever followed. And though this involved much pain for the patient, in

spite of the use of cocaine, I attribute the favourable result to the fact that there were no violent or even rapid movements and no suddenly induced pain. Unless a man uses a metal catheter on himself it is difficult for him to realize how much pain there may be. There is a sort of stretching sensation, even when cocaine has been used freely, and there is a peculiarly disagreeable shock just at the moment a metallic catheter enters the bladder which it is difficult to describe and I am sure impossible to understand without some actual experience.

Our knowledge of general, and especially skin, sensations has recently been greatly enlarged, chiefly by certain English investigators, and so far as pain is concerned I could add to what is already known. Reflex pain or referred pain is characterized by its diffuseness and its massive quality, by its being difficult to locate definitely, and by the fact that it may be far from the seat of the original cause of the pain.

As already stated, on two occasions I had a metallic catheter tied in for several days and nights, and to avoid injury was obliged to remain as nearly absolutely motionless as possible all the time. The whole constituted the most trying ordeal through which I have ever passed. Apart from the local pain in the urethral region and pain in the back from constantly lying on it almost motionless there was severe referred pain. It was impossible for me to say exactly where this was located, but it certainly was either in the scrotum or its contents principally. And in this connexion let me point out that no function of the body may escape the evil influence of such severe and long-continued pain. On both the occasions referred to I vomited in the evening food taken in the morning in an absolutely undigested condition. Here, then, was a case of reflex vomiting, traceable to irritation in the urethra and also a cessation of digestion due to the same cause and to pain. I believe *the urethra to be the most sensitive and most dangerous reflex tract in the whole body.*

You will understand, therefore, putting all these facts together, why I believe that no student should be allowed to graduate till he has had certain experiences, some of them in his own person. Among these I would certainly include the passage, under skilled observation, of a soft rubber and a gum elastic catheter on a subject, and the passage previously of both of these and a metallic catheter on himself. It is difficult for me to believe that, had the London house-surgeon who was my surgeon's substitute had any such personal experience, I would have so suffered at his hands, to which more than anything else my subsequent misfortunes were, in my opinion, due.

Allied to pain, yet very different from it, is shock. One who has been exceedingly weary or utterly exhausted is in a better position than any one else who has not had the actual experience to understand the sensations associated with shock. Pain one can to some extent describe, but shock is beyond words. I would that every member of the medical profession could have this experience for two minutes; it would be invaluable to him. But I would not wish the worst human fiend the experience of two hours of shock. It is very imperfectly understood physiologically. Blood pressure cannot in itself be a final explanation for any physiological condition, though altered blood pressure is undoubtedly associated with many. No doubt there is low blood pressure; but an explanation that refers shock to a profound modification in the structure even of the nerve cells—allied to that which occurs in exhaustion, but much more marked—seems to me to be farmore satisfactory.

That the concentrated wretchedness that the subject experiences is not realized by surgeons generally is the only explanation I can give as to why they are not more deeply concerned about the matter. If they felt as I do, the subject would be set down for discussion at the very next medical or surgical congress. On no subject connected with medicine do I feel so strongly, for I can give no description of my sufferings under shock that would be at all adequate. There was no physiologist, pathologist, or surgeon near to help me in any way. My own regular nurse, an admirable surgeon's dresser, failed me miserably. Then came a good angel in the form of a young woman, a nurse in training, whom I had never seen till that day. Would that time permitted me to describe her and her mental ministrations. She seemed to slowly draw me out of a hopeless slough of awful misery by methods of human sympathetic appeal that perhaps only a woman has at command. Well, it was so, for men are hopeless as nurses, and in many other situations if they could only see it; but as a sex they have an exceedingly good opinion of themselves, and seem to think they are equal to anything and everything that can fall to any human being to do or to understand.

And here again a word about nurses. During the past year I have seen enough of about a hundred who were either graduate nurses or nurses in training to give me ground for some strong convictions. I would rule out at least three classes of women from this profession:

1. Those without the delicate mental touch termed tact. A tactless woman is a sort of monstrosity. I had some slight and unpleasant experience of one such nurse in Canada, and a bad two days of another in England, when the matron at my request replaced her by a very admirable substitute.

2. Those whose hands will never learn delicate handling. One such I could only put up with because she was so well disposed and looked so successfully to my comfort in small matters, which is so important when one has both big and little pains and miseries to endure. Quite a contrary experience was mine with a young nurse who during all the weeks she attended to me after my big operation never on a single occasion caused me the least pain. A wonderful hand had this little nurse, and it was associated with a fine brain.

3. The amorous nurse. She is more or less dangerous for patients, students, and young doctors. Like Liszt, to the charming young lady who failed to please him in piano-playing, I would say: "Get married—get married quick—good-bye."

To my thinking, it would be better for themselves and for all concerned if many nurses in "homes," etc., in England were under less tension. On the other hand, I fear that many nurses in training in Canada do not take their profession seriously enough. They mingle thoughts of work and play too much together. I would not be doing justice to several of the London nurses who looked after me did I not bear witness not only to their professional efficiency and their sympathetic attention to every detail bearing on the comfort and welfare of the patient, but also their high degree of general culture, their refinement, and, what was a great matter for me, the beauty with which they spoke the English language. Some of them could give lessons in speaking to not a few of the London actors and actresses. But nowhere have I met a woman of more tact, better adapted to minister to the needs of the patient, and nowhere a nurse of more ability and general culture than two who were among my attendants in the Royal Victoria Hospital in this city. I again repeat that, in my opinion, the great problem is to attract the best type of woman to this noble profession by making it more and more honourable in the eyes of the public.

To do any sort of justice to the subjects of both psychological and practical interest to which attention has been called in passing would require a separate paper; but a word on a matter of a good deal of practical as well as of scientific interest—namely, hypnotic suggestion.

We are accustomed to invest with importance only that form of hypnosis brought about by some very special means that appeal to the eye. We are in these days rather under the domination of the eye. As a matter of fact, everyone hypnotizes himself by suggestions many times daily. We do it unconsciously, and the doctor hypnotizes his patients also unconsciously. Let me illustrate by a curious case of the latter kind. When taking an anaesthetic for the third time the expert said to me: "Now breathe out. Never mind the breathing in; that will take care of itself." Not only did I follow his directions before I became unconscious, but I found that I was breathing in the manner indicated when I had regained consciousness. The effect of the suggestion had lasted through the whole period of unconsciousness and beyond it. We may all observe that we make suggestions to ourselves that, at a later period when we meant them to be active, cause an uneasiness that is followed by a recurrence of the suggestion. When the metal catheter was in the bladder I hypnotized myself so fully with the idea of lying still that the suggestion seemed to be active in sleep even to a very complete degree. In such a case the value of such a personal hypnosis is obvious.

There is a peculiarity about the patient recovering from anaesthesia that is known, I imagine, to comparatively few—a sense of isolation and loneliness that may be quite foreign, as it was in my own case, to one's natural temperament. After an anaesthetic a patient is to some degree conscious sooner than might be supposed. I do not think a patient should ever be left alone on the supposition that he knows nothing or feels nothing. He feels very soon, and the sympathetic psychic touch of the nurse to whom he is accustomed—not a stranger—or that of an intimate friend, will prove a great comfort to him. After my prostatectomy, before I could speak other than with a thick tongue, I said, "Nurse, talk to me"; but she did it not and went on reading her book, for which I find it rather hard to forgive her, although she was a good surgeon's assistant.

You will by this time infer that my ideal surgeon is a man who, with all the general and special professional knowledge and skill of the day, illustrates, perhaps even more than the physician, that state of mind which results from contact with at least a little of every important department of culture; and who is possessed of that rarest and most valuable of all human gifts—the power to put one's self in another's place.

A MALIGNANT GROWTH OF THE KIDNEY.

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THE following case of malignant growth of the kidney, removed by operation at a comparatively early stage of development, offers some interesting features which seem to make it worthy of record.

A. R., aged 28, a bricklayer, was admitted to hospital on November 6th, 1909.

History.

In May, 1909, his first symptom appeared in the form of painless haematuria. On the third day he had violent pain in the right loin, passing down to the region of the right hip and to the right testicle. The pain was relieved by treatment. Haematuria persisted for a week. In July he went to camp, and while there had a second attack of haematuria without pain; a third painless attack occurred a few weeks later. From this time until November 5th he had no symptoms, but on that day blood appeared again in the afternoon, followed a few hours later by violent lumbar pain. In the course of this attack he was admitted to hospital.

Condition on Admission.

His symptoms were: (1) Severe pain radiating from the right loin down to the right groin and the right testicle; (2) blood in the urine sufficient to give it a deep port wine colour without clots; (3) vomiting. The haematuria steadily diminished during the next few days. It was determined that blood was coming from the right kidney, and as radiography gave a negative result, the diagnosis was renal growth. The right kidney was not palpable.

Operation.

On November 12th the kidney was exposed by an oblique incision in the loin. On palpation *in situ* a firm nodule was felt about the centre of the organ projecting slightly on its anterior face. After passing an elastic ligature round the pedicle the kidney was incised into the pelvis; on the cut face a growth was seen surrounded by cortical substance, and possessing a definite dense white capsule; on inspecting the pelvis a mass of soft consistency was found projecting into it, and the source of the haemorrhage was seen. As the penetration into the pelvis of naked growth pointed to malignancy, the kidney was removed.

The patient left the hospital well on November 25th, and was seen on December 18th in good health.

Description of Kidney after Removal.

The appearance of the organ after removal is shown in the accompanying photograph. Below the centre and surrounded by renal gland tissue a spherical mass is seen on each side which in the fresh state was the diameter of a halfpenny. It possesses a very well-defined capsule, the growth tissue itself being of a grey-yellow colour and soft. In the pelvis on each side a projecting mass is seen and to the summit of that on the right side of the picture clot is adhering. The projecting mass is purple-red in colour. A small clot is seen free in the pelvis.

The growth was examined histologically and presents two types of structure between which there are no lines of demarcation, that is to say single sections show both types though in varying degree. One type is that which is recognized as characteristic of the renal growths which arise in adrenal "rests," the hypernephromata; large cells with clear cell bodies and small spherical nuclei, polygonal in shape and arranged in masses with coarse trabeculae between them. The other type may be described as cuboidal-cell carcinoma; cells, with darkly staining cell bodies and large nuclei, arranged in branching columns atypical and irregular.

If the second type of cell growth alone had been found, the tumour would have been described without hesitation as a cancer of the kidney without special histological peculiarities; the presence of the first growth type shows that it had its origin in adrenal tissue.

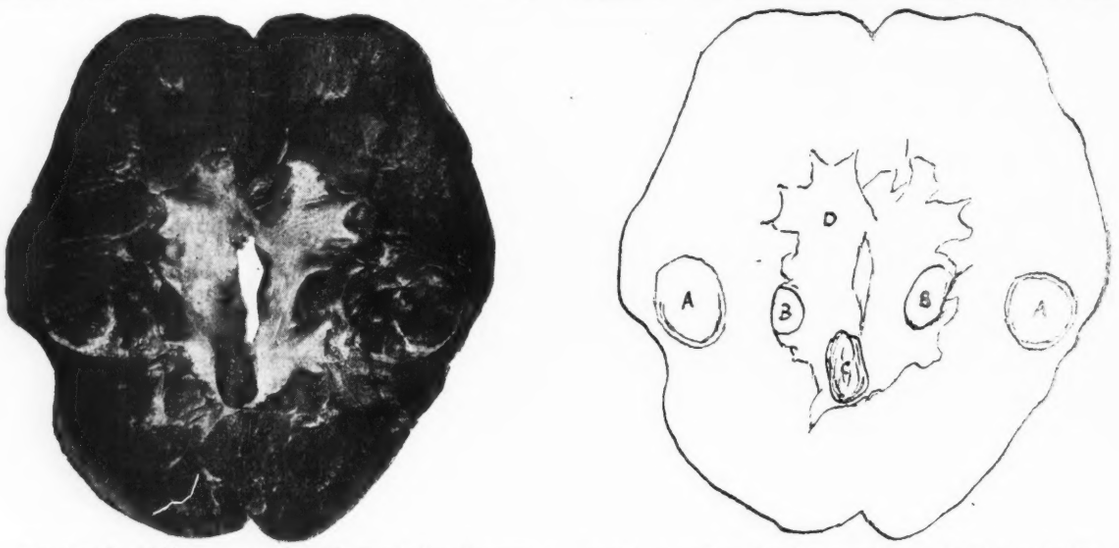
The points worthy of note are:

1. A growth of typical carcinoma structure arising in relation with adrenal tissue.
2. The situation of the adrenal "rest," surrounded for the most part by renal cortex.
3. The prominence of haematuria as a symptom.

Dissemination in relation to hypernephromata is known sometimes to take the form of wide distribution of secondary growths showing the typical adrenal-like structure. In this case local malignancy in the form of capsule transgression and infiltration was associated with the growth of a carcinoma type, although the tumour betrayed its origin in adrenal tissue by displaying the characteristic structure of the latter in part. This suggests that a certain number of malignant growths of the kidney now classed simply as carcinomata may commence in adrenal rests, their origin being obscured by the active carcinoma growth soon after transformation has taken place.

Most described adrenal "rests" in the kidney are subcapsular. In this case the encapsuled portion of the growth showed that the "rest" in which it originated was embedded in renal cortex.

Many hypernephromata are latent throughout; a certain number have been discovered accidentally in the *post-*



Photograph of kidney removed, with illustrative diagram. A, Growth in section, showing capsule. B, Growth projecting into renal pelvis. C, Clot free in pelvis. D, Renal pelvis.

mortem room. Many of the described examples have shown no local malignancy, displacing and not infiltrating, and remaining very definitely encapsuled. This has given rise to the statement that absence of haematuria is characteristic of this growth. This statement is, however, much too absolute. Authorities whose records cannot be questioned—Israel, for example—have described series of such cases in many of which haematuria was a prominent symptom.

It appears clear that the renal tumours arising in adrenal "rests" do not belong exclusively either to the group of simple tumours or to that of malignant tumours. Some undoubtedly are simple clinically and "typical" histologically, others malignant clinically and "atypical" histologically.

PERITONEAL PSEUDO-MYXOMA ORIGINATING FROM THE VERMIFORM APPENDIX.*

BY

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THERE is, perhaps, no part of the body which shows so varied a series of morbid processes as the peritoneum. This is in part due, no doubt, to the immense variety in the nature and severity of the injuries to which the peritoneum is subject and its equally inexhaustible versatility in responding to them. In the almost infinitely finely graded series of peritoneal lesions we may make a rough distinction into two classes: First, those which are primarily microbic or in which a microbic process comes secondarily to acquire predominant importance, and secondly, those in which the source of injury is non-microbic and the resulting process of reaction runs its course without microbic complication. The first class includes practically all the forms of peritonitis which are at all commonly met with by the clinician. The second class, which is perhaps more familiar to the pathologist, is, as a whole, very uncommon clinically, and on that account its rare appearances in practice are likely to be the cause of difficulty in diagnosis and prognosis. It comprises the changes which accompany the presence in the peritoneal cavity of foreign substances which are absorbable slowly or not at all, irritating enough to produce some reaction but not enough to produce any extensive transudation of organisms from the bowel, and in themselves relatively or wholly aseptic. Such conditions may, for want of a better name, be referred to—following the custom of German pathologists—as "foreign body peritonitis."

Fig. 1.—Piece of omentum removed at operation. The specimen has lost a great deal of its mucinous material through being stored in alcohol for many months. Still, however, the resemblance to a colloid carcinoma is very close. The lighter parts of the photograph show the normal omental fat, the darker parts are the translucent gelatinous masses of encapsuled mucin incorporated into the substance of the omentum.

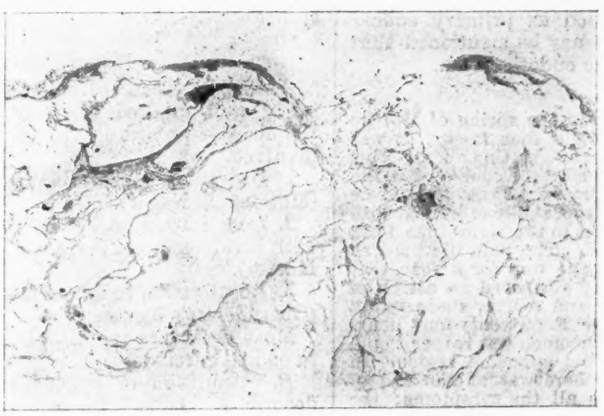

Fig. 2.—Microscopic section under low power of pseudomyxomatous omentum. The delicate stroma-like network of inflammatory exudate and the general resemblance to a colloid carcinoma are well shown.

Two broadly distinguishable types of this form of peritonitis present themselves. First, that in which the irritating substances are numerous and small, such as the ova of tapeworms, the hooklets of echinococcus embryos, or minute fragments of undigested food left after a spontaneously recovering or successfully treated perforation. In this form the reactive changes are usually much more prominent than the irritant itself, and the resulting picture is that of a pseudo-tuberculosis which may bear to the naked eye, and even to the microscope, the closest resemblance to a true tuberculous peritonitis.

The second type of foreign body peritonitis is that in which the irritating substance is very conspicuous and the reactive changes very slight. The commonest example of this condition is the *Pseudo-myxoma peritonei*, which occasionally follows the rupture of certain ovarian cysts.

Through the movements of the intestinal coils the contents of the cyst are distributed amongst the viscera throughout the whole peritoneal cavity, producing very peculiar and thoroughly characteristic changes, which were first described by Werth[1] as a foreign-body peritonitis. In consequence of the mechanical and chemical irritation of the peritoneum there arises a reactive inflammation which leads to a slow removal of the gelatinous material by absorption, organization, and encapsulation. The last occurs by penetration of the masses of mucinous material by vascular processes derived from the connective tissue of the peritoneum. These processes ramify throughout the gelatinous masses, subdividing them by a fine connective tissue network. This is especially marked, as a rule, in the great omentum, which is hugely thickened, and appears to be transformed into a congeries of translucent cysts (Merkel).[2]

Following the demonstration of the true nature of this condition by Werth in 1884, there was some controversy as to how far the course of events was as he had described, and how far the result was contributed to by actual metastasis of the original growth upon the peritoneum. Olshausen was able to show that the latter mechanism did at times act, but the original explanation of Werth remained uncontroverted for many cases, and was strengthened indirectly when, in 1901, Fraenkel[3] published the first case in which a similar condition was shown to be due to the rupture of a vermiform appendix distended with mucus. The case was that of a man of 79, who had died of cerebral softening without having shown during life any evidence of an abdominal disease, so that the condition was found quite unexpectedly *post mortem*. Large free gelatinous masses of mucoid material were found in the pelvis and in the right iliac fossa; the peritoneum in contact with the masses showed a peculiar villous condition due to the outgrowth of fine ramified processes covered by endothelium. The case remains unique in the fact that there was no encapsulation of the mucoid material as there has been in all the other cases yet described. There was a cystic dilatation of the appendix, which had ruptured.

* Read before the Pathological Section of the Royal Society of Medicine.

Since this observation of Fraenkel a few more cases have been published, but the total number is still very small. In January, 1908, an interesting and valuable contribution to the subject was published by Neumann of Berlin.[4] He was able to give references to 8 cases, and to add a remarkable and in some respects unique case of his own. In the literature since then I have been able to find no other case, so that the one I shall briefly report below would seem to be the tenth on record. In addition to Fraenkel and Neumann's cases, the other observations have been three by Oberndorfer,[5] and one each by Nager,[6] Merkel,[7] Hueter,[8] and McConnell.[9]

The condition is no doubt in fact a rare one, for a necessary antecedent to it is a distended and aseptic or relatively aseptic appendix which is sufficiently free from surrounding adhesions to allow perforation into the general peritoneal cavity to occur. On the other hand, it seems very unlikely to be so rare as the smallness of the literature suggests. There are indeed two strong reasons for supposing it not very rarely to escape observation or diagnosis. In the first place, several cases have been found unexpectedly *post mortem* in old persons, and show that the condition may run a perfectly symptomless course, while secondly, the appearances met with present an astonishing resemblance to colloid carcinoma, so that doubtless some cases are regarded as primary colloid carcinoma of the peritoneum. It may be mentioned that Nager described his case as a cystic endothelioma.

Fig. 3.—Part of pseudomyxoma of omentum under higher power. A, Omental fat: B, mucinous material; C, strand of inflammatory exudate containing many round cells; D, vascular process growing out from omentum into the mucinous material.

CASE.

The patient was a man aged 36. In the spring of 1907 he had had an attack of pain in the right iliac fossa. It was fairly severe, but did not prevent him from getting about. This pain lasted for about ten days, and during the course of it the patient for three or four days passed dark porter-coloured urine containing blood. The abdomen was repeatedly examined with great care, and beyond some tenderness in the right iliac fossa nothing whatever abnormal was found. The pain disappeared spontaneously, and the patient was quite well for a year, that is, until May, 1908, when he suddenly developed an attack of appendicitis. The onset was abrupt and severe, there was a rigor, and the temperature rose to 104° F. Twenty-four hours after the onset the right side of the abdomen was rather rigid, and a large mass could be felt in the appendix region. In spite of the very alarming invasion, there was at the end of thirty-six hours a distinct decline in all the symptoms; the mass in the iliac fossa could be felt more distinctly, and was at least the size of a man's fist.

The attack continued rapidly to subside; by the fourth day the temperature was normal, and the patient looked and felt quite well. The pulse was slow, the appetite good, and the bowels acted normally. The large swelling was, however, practically unchanged. It was intended to wait for the disappearance of the mass before removing the appendix, but as in a month no diminution had occurred, and the patient began to have pain when he got about, operation was decided upon. The case was regarded as a fairly ordinary example of appendicitis, although the very rapid appearance of the swelling and the persistence of it were recognized as unusual.

At the operation there was a considerable amount of clear free fluid in the peritoneal cavity. The omentum was much enlarged by the presence of large rounded nodules of gelatinous translucent appearance. The parietal peritoneum as far as it could be explored, the caecum, and the ascending colon were thickly set with similar masses. There were many recent filmy adhesions. No trace of the appendix could be made out, but as the condition was regarded as certainly one of inoperable colloid carcinoma, and any manipulation produced free haemorrhage, no extensive search was made. A mass of omentum the size of a man's hand was ligatured off and removed, and the wound was closed.

The patient recovered very rapidly; he left the hospital in less than a fortnight, *and from that time to this has had no abdominal symptoms whatever*. At present—eighteen months after the operation—the most careful examination of the abdomen reveals no abnormal sign of any kind.

The piece of omentum removed (Fig. 1) reproduced with perfect exactitude the appearance of advanced colloid carcinoma. Several pathologists to whom I showed it had no doubt whatever as to its nature. Microscopically, the structure at first sight gives the same impression of a cancer the cells of which have been completely transformed into colloid. More exact observation shows that the stroma enclosing the gelatinous masses is a product of inflammatory reaction rather than a fibrous tissue, and that the gelatinous substance gives the reactions not of colloid but of mucin. The specimen corresponds closely with those described in the other cases.

Fig. 4.—Part of pseudomyxoma of omentum showing a mucinous mass, over the surface of which the endothelial cells of the peritoneum have grown.

MACROSCOPIC ANATOMY.

A.—Distribution of the gelatinous material. Three fairly well marked types of the condition can be distinguished according to the amount of peritoneum involved.

1. Universal dissemination over the peritoneum (McConnell, Nager).

2. Localization to ileo-caecal region and pelvis, usually with involvement of peripheral part of omentum (Fraenkel, Hueter).

3. Localization to immediate neighbourhood of appendix (Oberndorfer's 3 cases).

Most observers mention the extraordinary resemblance to colloid carcinoma.

B.—Condition of appendix. In 2 cases this is not described. In all the others there was distension by mucinous material.

Three varieties have been met with:

1. Simple distension following obstruction by scarring, or in one case by a carcinoma of the appendix.

2. Diverticula of the mucous membrane which reached the surface and ruptured.

3. A kind of multiple cystic degeneration of the appendix wall.

In most cases there was an actual perforation. In one it seemed probable that the appendix had burst, and then healed after discharging its contents, which were again accumulating at the time of the examination.

MICROSCOPIC ANATOMY.

The gelatinous substance shows the microchemical reactions of mucin (thionin, mucicarmine, etc.). With the exception of Fraenkel's case the mucinous masses were always encapsuled by recently formed inflammatory tissue, which was usually of extreme delicacy on account of the slightness of the irritation. In one case (Nager) there was evidence that absorption was occurring through the lymphatics. There is a tendency for the peritoneal endothelium to grow over and cover in the foreign substance. On the other hand, the endothelium may persist under cover of a layer of mucinous material, and in this case the cells are apt to become cubical or columnar.

Most observers have found scattered amongst the gelatinous substance chains of cubical or columnar cells of epithelial appearance. Such are present in the sections from my case. Some observers regard these as derived from the epithelial lining of the appendix, others think they are due to transformation of the peritoneal endothelium—a more probable view when we bear in mind the known capacity of these cells to show cubical or columnar forms under abnormal circumstances.

CLINICAL FEATURES.

The cases have come under observation in four different ways:

1. As an unexpected *post-mortem* condition when there had been nothing clinically to suggest its presence.
2. As a cause of slow but pronounced abdominal enlargement, in one case lasting ten years.
3. As an unexpected discovery during an operation for hernia (Hueter's case).
4. During operation for appendicitis. In one case acute appendicitis (Neumann); in one case quiescent appendicitis (case reported here).

In Neumann's case the tumour was found to be localized in the right iliac fossa, and was successfully removed with the appendix. This is the only case which has been treated radically. It and the case I report here are the only ones in which the patient has recovered. The latter case is remarkable in that spontaneous recovery followed abdominal section, with partial removal of the gelatinous material, and without removal of the appendix.

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PELVIC HAEMATOMA OF OVARIAN ORIGIN.

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IN reading in the JOURNAL of January 29th, p. 262, the report of Dr. Lockyer's paper, the cases he quotes, and those quoted by others who joined in the discussion, remind me of a paper I published some three years ago in the JOURNAL,[1] the title of which was, On the Cause of Acute Illness supervening during Menstruation. In this paper I gave notes of several cases of illness starting during the menstrual period, the cause of which I believed to be excessive haemorrhage into a Graafian follicle; in one case the haemorrhage apparently ruptured through the follicle and became intraperitoneal, forming a haematocele. All these cases occurred in virgins, and there was no suspicion whatever of pregnancy.

Since writing the paper I have seen two cases in consultation, tending to bear out the view I took of their origin, which Dr. Lockyer's paper strongly confirms.

CASE I.

A married nullipara, aged 20, was always menstruating on the 28th of each month, but this time started some little time before. She was seized with intense abdominal pain on the left side, and then commenced to lose blood from the vagina. The pulse was 120, soft and compressible, the temperature normal; there was no pallor, and no shock, but intense and constant vomiting. The breasts were quite virginal, the vaginal discharge was bright red, without clots or shreds in it. There was a little dullness in the left iliac fossa, where tenderness was most marked. The uterus was not enlarged high up, and the cervix not softened. The pouch of Douglas was full of a soft, elastic substance feeling exactly like blood clot, and there was an indefinite mass in the left fornix; rectal examination confirmed this. The patient absolutely refused operation, and was most intractable during convalescence, but was walking about in a fortnight.

CASE II.

I had arranged to operate for another condition; just before the operation she told me of the great suffering she had experienced ever since her last period. On opening the abdomen I found the right ovary enlarged and distended, with blood clot from a Graafian follicle, which was just on the point of rupturing into the peritoneum.

The intense nausea and vomiting, reminding me of an injured testicle, has always struck me as a feature of these cases, as opposed to an extrauterine gestation, and seems to be explained by the injury to the ovary.

I have not referred to modern literature on the subject, but this last week in looking up some of the older writers on diseases of women, I find that Barnes,[2] who distinctly recognized extrauterine gestations, in his article on haematocele quoted Nélaton and Langier, who insisted that a great cause of haematocele arose during the physiological work of ovulation. Churchill[3] does not seem to recognize extrauterine gestations, but says that rupture of a Graafian follicle during its extreme congestion at a menstrual period is the cause of haematocele.

My object in writing three years ago was to draw attention to a class of case which, so far as I knew, was not described in any textbook, or, if the cause were mentioned, was not emphasized sufficiently as the origin of very serious illness. It is not only serious at the time, but, as I hope to be able to show later, may in its minor degrees be one of the determining causes of such chronic sources of trouble as ovarian dysmenorrhoea and prolapsed and adherent ovaries, which often seem difficult to explain in the absence of ordinary infective processes.

Several of my cases occurred a good many years ago, and were not confirmed by operation; but in one case the illness was followed by very disabling dysmenorrhoea. And I believe that, just as in a haematoma of the testicle it may be necessary to remove the organ in some cases, so in some of these cases it may be necessary to do oöphorectomy to prevent chronic invalidism; and that although in married women the diagnosis from an extrauterine gestation may be impossible until the abdomen is opened and the part examined, yet one must always in virgins bear in mind the possibility of this origin of a haematocele.

REFERENCES.

[1] BRITISH MEDICAL JOURNAL, 1907, vol. i, p. 190. [2] *Diseases of Women*, 1878. [3] *Diseases of Women*, 1874.

A CASE OF FAMILY ALBUMINURIA.

BY

J. NEWBERY FERGUSSON, M.B., B.C.CANTAB., M.R.C.S., L.R.C.P.

THE presence of albumen in the urine is not now regarded as an invariable indication of renal disease. Leaving out of consideration those cases in which albumen may enter the urinary tract below the renal tubules, as in pyelitis, cystitis, prostatic abscess, or urethritis, persons in perfect health occasionally pass small quantities of albumen. The great majority of such cases belong to the class of paroxysmal or functional albuminuria, and there is usually some relation between the passing of albumen and excessive physical exertion, excessive ingestion of albuminous food, emotional disturbances, or some other cause.

The case of a man constantly passing large quantities of albumen over a period of many years, without any apparent cause, must be regarded as rare, and the fact that all the members of the same family present the same peculiarity in varying degrees renders the matter the more worthy of notice.

One of the functions of the kidney, while ridding the blood of the waste products of metabolism, is to prevent

the escape of albuminous matter from the circulation, and the explanation of most cases of albuminuria is that disease of one kind or another, either by directly damaging the kidney or by indirectly interfering with its nutrition, has impaired this function in greater or less degree. It is, however, conceivable that some few persons have kidneys in which the albumen-retaining function is only imperfectly developed; indeed, Mörner found that the urine of normal persons contained traces, undetectable by ordinary tests, of albuminous substances, which he believed to have escaped through the kidneys.

The assumption of the possibility of imperfect development of the albumen-retaining function may be, to some extent, justified by the consideration of the following history since we find the abnormality of the parents existing in every one of the eight living offspring.

I will describe the case of one of the sons first, as he is the only member of the family whom I have personally examined.

X. Y. Z., born in 1861, is a civil engineer. In 1886 he went to Central America in the course of his professional work, and there suffered from remittent fever. He came home and consulted a physician, who told him that his urine was full of albumen, and gave the comforting prognosis that he would probably live for a month, whereas a similar case from the same part of the world that the doctor had examined a day or two previously, would probably not last more than three weeks. As the fatal month elapsed uneventfully, and as X. Y. Z. felt quite well, he returned to his work abroad, and has spent the greater part of his time since then in Latin America.

About eighteen months ago, more than twenty-one years after his doom had been pronounced, being at the time on a holiday in England, he consulted me for an attack of dyspepsia of an ordinary type. In the course of examination, I asked for a specimen of urine, and he told me I would find it full of albumen, and gave me his previous history. The result of the urine examination was as follows:

Twenty-four hours specimen, volume 30 oz., medium acidity, specific gravity 1.022. On boiling, a heavy precipitate of albumen was obtained, which, after standing an hour or two, occupied the lower half of the column of urine. Quantitatively, by Esbach's method, albumen was found present to the extent of 3 grams per litre. Microscopic examination revealed no casts or corpuscles, and there was nothing to suggest renal trouble.

The heart was normal in size, the sounds were normal, the blood pressure was within the limits of the normal, and there was little or no arterial thickening. There had never at any time been any oedema of the eyelids or legs, or any other sign of renal disease.

On many subsequent examinations I have always found albumen present, and I think I am justified in believing that it has been constantly present, at any rate since it was first detected in 1886, by the fact that, since then, the patient has frequently had the urine examined, always with a positive result, and that three insurance companies refused him on that ground between 1886 and 1889. During the eighteen months in which I have from time to time seen X.Y.Z., he has maintained his usual high standard of health, and although he has always been thin and spare, he is very tough. I examined the urine some time after I first saw the patient, to find out the exact nature of the coagulable proteid, and it proved to be entirely serum-albumen.

The most remarkable feature of the case, however, is that X.Y.Z. told me that all the members of his family exhibit the same peculiarity. He has, at my request, kindly taken a great deal of trouble to ascertain the facts, and, while I cannot vouch for their accuracy, I have no reason to believe they are not correct, so far as they go. I append a tabulated statement of his investigations.

Father, alive, 87, alb. sl. ...	F., alive, 56, alb. sl.; 3 ch.
Mother, alive, 78, alb. badly	M., alive, 54, alb. badly.
	F., alive, 53, alb. badly; 2 ch.
	F., alive, 52, alb. sl.; 2 ch.
	F., alive, 51, alb. badly; 1 ch. (dead).
	X.Y.Z., alive, 49, alb. badly.
	F., dead, only lived 1 day.
	M., alive, 47, alb. sl.
	F., alive, 45, alb. badly; 3 ch.

I understand that all the members of the family are perfectly well, and, considering the age the parents have attained, such a case as this should have an important bearing on the question of rejection or "loading" of candidates for life insurance.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

THE LOCAL INJECTION OF SODIUM SALICYLATE IN ACUTE RHEUMATISM.

In acute rheumatic inflammation of a joint there is much pain, heat, swelling, and an increase of tension, with the production of an excess of CO_2. In whatever form salicylic acid is taken, it is converted into sodium salicylate in the blood, and circulates as such. Its value depends upon the free acid, which is a powerful antiseptic; whereas the salt itself has little or no antiseptic virtue. The sodium salicylate, coming in contact with the nascent CO_2 generated at the inflamed part, is split up into salicylic acid, which exhibits its antiseptic properties. The carbonic acid and the phosphoric acid of the blood are constantly struggling for the possession of sodium. The salts formed by them depend upon their relative masses. If CO_2 is in excess we get sodium carbonate, and the tension of CO_2 in the tissues is at its highest. In fact, Köhler has attained the above condition of the liberation of salicylic acid from a sodium salt in the laboratory by using the blood of a suffocated animal. The action of salicylic acid or salicylate in rheumatism is, therefore, general and local. It might be argued that if the antiseptic property of the acid is the cause of the cure of rheumatism, why do not other antiseptics serve the same purpose? But this drug possesses other qualities which admirably adapt themselves to the treatment of rheumatic fever. It has antithermic, analgesic, cholagogic, and the eliminatory properties. We must take into account, also, the susceptibility of different bacteria to different substances, and there can be no doubt as to the special sensitiveness of the specific micro-organism of acute rheumatism to salicylic acid any more than that of syphilis to mercury and of malaria to quinine.

Considering, therefore, the value of the above drugs as a specific, and that their action is local, the idea of treating these cases of arthritis locally naturally suggests itself. I therefore decided to treat these cases by the injection into the joints of solutions of sodium salicylate, to obtain locally, by the liberation of salicylic acid, the analgesic, antiseptic, and the specific action of the drug. This has been successfully carried out by Santini[1]; he gives no explanation, but he observes that the tendency to relapses was greater; his injections were endoarticular, and in some cases periarticular. Whitla recommends a deep hypodermic injection of carbolic acid in the treatment of synovitis and other joint swellings, and Senator speaks favourably of Kunze's method of injecting 1 per cent. solution of carbolic acid in acute rheumatism. Gillespie has recorded several cases in which 10 per cent. solution had been used with marked success so far as the relief of pain was concerned. It appears to me that the curative value of these methods lies not in the carbolic acid, but in its conversion into salicylic acid, which in the laboratory is prepared by the action of CO_2 upon carbolates; we know that the carbolic acid is transformed into a carbolate in the blood and tissues. Therefore, when carbolic acid is injected into an inflamed joint the carbolate comes in contact with nascent CO_2, the result of local inflammation, with the effect that free salicylic acid is formed which asserts its influence there.

The above, therefore, is the best possible explanation that can be furnished at present for the different methods of treating arthritis locally, by injections of sodium salicylate or carbolic acid.

BIRENDRA NATH GHOSH, L.M.S. Calcutta Univ.,
Lecturer on Materia Medica and Therapeutics,
Calcutta Medical School.

DEATH FROM SPINAL INJECTION OF NOVOCAIN AND STRYCHNINE.

In the BRITISH MEDICAL JOURNAL for November 13th, 1909, I read the following statement by Professor Jonnesco: "General spinal anaesthesia is absolutely safe; it has never caused death nor any important complications."

I wish to record the following case of death which occurred under spinal anaesthesia in the General Hospital,

[1] BRITISH MEDICAL JOURNAL, October 22nd, 1904.

Madras, in August last. The patient was a native of India, suffering from elephantiasis of the scrotum, aged about 40, somewhat fat, but otherwise healthy. Weight of scrotum over 30 lb.

The spinal fluid flowed freely on puncture between the twelfth dorsal and the first lumbar vertebrae. I injected 3 c.cm. of a solution containing 10 cg. of novocain and 1 mg. of strychnine hydrochloride. The patient sat up for one minute, and then lay down with his head on a low pillow. In five minutes he was anaesthetic to the level of the nipples, and in ten minutes almost to the level of the clavicles.

During the progress of the operation (in which I was assisted by Captain Harley, I.M.S., who has also had considerable experience in spinal anaesthesia) the patient complained of difficulty in breathing. Shortly afterwards he retched once or twice, so the dyspnoea was attributed to a feeling of nausea and faintness, which sometimes occurs, but generally passes off very quickly.

Instead of improving, however, the dyspnoea and distress increased, and presently the patient stopped breathing. Artificial respiration was commenced at once, and it was noticed that the arms and chest were distinctly rigid—so much so, that it was not easy to move them.

At the time of failure of respiration the circulation was active, because I had to jam a sponge into the wound to stop oozing while I abandoned the operation to perform artificial respiration.

The patient never breathed again. Haemorrhage and shock in no way contributed to the fatal result. There had been very little loss of blood. The whole operation had barely lasted half an hour, and the patient had stopped breathing just as the neck of the tumour was about to be severed, so that the main mass remained connected with the pedicle, and there was no cause for shock. The cause of the death was either respiratory paralysis or spasm, due to the action respectively of either the novocain or the strychnine on the medulla. The stiffness of the arms and chest would point to the action of the latter. I have always used novocain for spinal anaesthesia. In 1908 I injected it for some thirty or forty operations by lumbar puncture. This year, after reading Mr. Canny Ryall's paper in the *Clinical Journal*, I added a milligram of strychnine to my novocain solution, and made my puncture between the eleventh and twelfth dorsal vertebrae, or between the twelfth dorsal and first lumbar. I employed the new method in some half-dozen cases, and was very pleased with the results.

I still believe that spinal anaesthesia has a future before it, but it is clear that we have not yet discovered how to free it from danger, and I confess that in future I shall be content with the evils and dangers that I know, and not risk the occurrence of any more tragedies like the one I have related.

If the method could be guaranteed free from danger (1) to life, (2) from post-operative paralysis, I should certainly use it in preference to general anaesthesia; from the operator's—and, I think, usually from the patient's—point of view it would then be almost ideal.

M. GABBETT,
Major I.M.S.

General Hospital, Madras.

P.S.—I prepared the strychnine solution myself. The 5 per cent. novocain solution was obtained in ampoules from the Saccharin Corporation Company, 2 c.cm. containing 0.1 gram with 0.1 gram mannitol.

The seventh International Congress of Criminal Anthropology, which was to have been held at Cologne in August next, has been postponed till October, 1911.

THE late Miss Emma Brandreth has by her will bequeathed £1,000 to King Edward's Hospital Fund for London, £500 to the Royal London Ophthalmic Hospital, and £250 each to Guy's Hospital, Middlesex Hospital, East London Hospital for Children, Shadwell; Poplar Hospital for Accidents, Cheyne Hospital for Sick and Incurable Children, Royal Dental Hospital, London; London Fever Hospital, New Hospital for Women, St. Peter's Hospital for Stone, Royal Free Hospital, Bolingbroke Hospital, and the Royal Sea Bathing Hospital, Margate. The residue of the estate, estimated at about £29,000, is to be distributed amongst charitable hospitals or institutions which the executors may consider most deserving or most in need of help.

British Medical Association.

CLINICAL AND SCIENTIFIC PROCEEDINGS.

YORKSHIRE BRANCH: LEEDS DIVISION.

Leeds, Tuesday, February 15th, 1910.

Dr. NIGHTINGALE in the Chair.

Some Points in Modern Hospital Construction.

DR. E. O. CROFT read a paper on some points in modern hospital construction. A general account of the various departments of hospitals was given, and the advantages of single ward units in separate pavilions were pointed out; large hospitals consisting merely of a repetition of such units, the admission, administrative and other departments, being common to all. The choice of a site depended partly upon geological conditions and sanitary possibilities, and partly upon the class of diseases admitted. Urgent cases generally required central hospitals, but when these were in large towns special care was required in adapting the buildings to the site to ensure sufficient air and light access to the ward units in particular. On a damp soil the artificial drainage must be specially thorough, and the floor level should be well above the ground to allow a free passage of air beneath. The basement should be unoccupied, and constructed of arches or walls with free openings to allow a free passage of air beneath the ward floors, and means must be taken to exclude rubbish. The aspect of the wards and their arrangement upon the site at disposal, was discussed, and the ground plans of St. Thomas's, the Herbert, Netley, University College, the Leeds Infirmary, and other hospitals compared in this respect. The position and relations of the various departments to one another for convenience of access while being sanitarily disconnected were described, and the general requirements of each department mentioned. Referring to details of ward construction, the importance of large linear wall, and superficial floor space per bed as compared with height was emphasized. Undue width diminished the range of penetration of sunshine, and this was pointed out as one of the disadvantages of circular wards which required a large diameter. Artificial ventilation which required the permanent closure of windows was disapproved, and some means of natural cross ventilation approved, aided by fan extraction, and suitable arrangements of double windows to prevent draughts, and means of warming the entrant air by stoves or radiators. Dr. Croft explained, *in situ*, the various features in the construction of the new buildings of the Hospital for Women and Children, in which the meeting was held, and how the architect, together with the staff and committee, had carried out the requirements of modern hospital hygiene and the necessities for modern treatment.

Uses of the Vaginal Pessary.

Dr. OLDFIELD read a paper on this subject. He said that whereas formly gynaecologists differred in their views as to the variety of pessary to be used in any particular form of displacement of the uterus, at the present time the question rather was as to whether the pessary should be used at all. Extremists would operate where the pessary would give complete relief, but most surgeons still believed in the temporary value of the Hodge pessary in uncomplicated backward displacements and in the permanent value of the ring for cases of incomplete prolapse. Pessaries were not suitable in the treatment of young unmarried women. In others they should be removed and operation advised when the symptoms persisted or when for any reason a well-fitting instrument caused discomfort. Operation yielded good results in suitable cases. At the present day there appeared to be fairly general agreement as to the best operation for any particular displacement. When operation was refused, or for any reason contraindicated, a pessary could usually be fitted to relieve symptoms, and it was in such cases that the pessary found its chief place in gynaecology. In the discussion which followed Dr. STEWART, Dr. CLARKE, and Dr. CROFT took part.

Specimens, Etc.

Dr. ROWDEN showed: (*a*) Radiograph of an hour-glass stomach, and (*b*) radiograph of a vesical calculus. Dr.

Oldfield showed: (*a*) Pyosalpinx, (*b*) fibroid tumour of uterus, and (*c*) malignant disease of cervix uteri removed by Wertheim's operation.

Vote of Thanks.

A vote of thanks was accorded to the authorities of the hospital for the use of the board-room and for their entertainment.

Seventeen members were present.

Reports of Societies.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

Thursday, March 10th, 1910.

Mr. G. A. Berry, President, in the Chair.

Xerosis of Conjunctiva and Night Blindness.

Mr. Malcolm L. Hepburn read a paper on xerosis of the conjunctiva and night blindness. He said the theory hitherto accepted regarding the cause of this complaint—namely, torpor of the retina due to general malnutrition—could not be justified, either by the condition of the patients or by the presence of the ordinary signs of defective circulation in the retina. A more probable explanation of the night blindness was that certain rays of light acted prejudicially on the visual purple, causing retardation of the normal metabolism—a theory borne out by the occurrence of this complaint during the months from May to September, when the intensity of the rays of light was presumably at its greatest. The relationship between the xerosis patches and the night blindness presented many difficulties, and while the connexion between the two seemed to be a very close one, a common cause was not easy to find. It was suggested, however, that the same rays of light which influenced the visual purple acted in some way on the conjunctival mucus glands, inhibiting their secretory function; and in support of this it was found that during the continuance of the xerosis patches the night blindness persisted; whereas when the former were removed the latter disappeared also. The treatment usually adopted varied considerably, since it was found that many remedies produced an amelioration of the symptoms, though the time they took to act differed according to the special method employed. Some relied on external remedies alone, while others strongly advocated drugs internally without any local application whatever. Bandaging the eyes for a short time had alone been known to give relief, and whatever treatment might be used must evidently not only modify the action of the special rays of light on the conjunctiva, but also their path through the pupil to the retina, since in no other way could the simultaneous improvement in the two prominent symptoms be explained. Arising out of the discussion on this subject it appeared that there was some reason for thinking that congenital night blindness, xerosis of the conjunctiva and night blindness, and the night blindness of malnutrition might be due to a common cause. Dr. Levy said cases which he saw showed fundi which were paler than ordinary, and he thought the paleness of the fundi had something to do with the disease. But Mr. Hepburn had not borne that out. However, he though albinos did not, as a rule, show night blindness, and they saw better in the night than in the day. He agreed that malnutrition had nothing to do with it. He had not seen xerosis alone. Mr. S. Mayou said that some years ago he examined a number of such cases, and found the changes in the epithelium were in the direction of creatinization, due, perhaps to the fact that the disease occurred during the prevalence of hot dry winds. Mr. Devereux Marshall pointed out that the macula did contain visual purple; it was not thought to because the visual purple bleached quickly in light. It had also been said that the bat's eye did not contain visual purple. This was wrong, for it certainly contained a photo-chemical substance which acted precisely like visual purple. Mr. Mold, Mr. Johnson Taylor, Mr. Sydney Stephenson, and Mr. Harman continued the discussion; and Mr. Hepburn replied.

The Bacteriology of Panophthalmitis.

Mr. R. R. James read a paper entitled, A Contribution to the Bacteriology of Panophthalmitis. He related the case of a labouring man who was admitted into St. George's Hospital in November, 1909, with what appeared at first to be an orbital cellulitis following a wound of the upper lid received a couple of days before. There was marked proptosis and extreme chemosis, with haziness of the cornea, but no hypopyon. Incisions were made in the lids, but no pus was found. Patient's general condition, which was extremely bad on admission, began to improve, but a couple of days later the conjunctival sac was found to be lined with a tough membrane. The eye was still proptosed, the cornea was uniformly yellow in colour, and gas bubbles and pus were observed issuing from a tiny spot at the upper part. The hole was enlarged, and the contents of the globe scraped out, and the man made a slow but uneventful recovery. The bacteriological report by Dr. Slater showed that swabs from the pus yielded a streptococcus and a large gram-positive, immobile, non-sporing bacillus, closely related to, if not identical with, the *Bacillus aërogenes capsulatus*. The results of cultivation on milk, potato, gelatine, and broth were given, and also the results of inoculation of a guinea-pig. The animal rapidly died, and the *post-mortem* findings were similar to those described in a previous paper on acute spreading gangrene, by the writer (Mr. James). The paper was discussed by Mr. Mayou, and Mr. James replied.

EDINBURGH OBSTETRICAL SOCIETY.

Wednesday, March 9th, 1910.

Dr. F. W. N. Haultain, President, in the Chair.

Removal of Uterus in Certain Diseased Conditions of the Adnexa.

Dr. J. M. Munro Kerr read a communication on the importance of removing the uterus in certain diseased conditions of the adnexa. While the principle of conservative treatment of the appendages was approved by every gynaecologist of experience, the mistake was occasionally made of not being radical enough. It was generally accepted that the uterus furnished no internal secretion, and was in the absence of both ovaries and tubes a useless organ. Hence there was no reason for trying to save it in bilateral disease of the appendages. In two diseases in particular it was his custom to remove the uterus—malignant disease of the ovary and pronounced double pyosalpinx. He had twice had to remove a malignant uterus within a year of the removal of a malignant ovary, and he had twice seen coexisting carcinoma of the ovary and adeno-carcinoma of the uterus. But for the routine removal of the uterus as now advocated the latter would not have been discovered. The real practical difficulty lay in deciding when the ovarian growth was really carcinomatous, but his rule was to treat as malignant all that had even the slightest suspicion of malignancy. After removal of pus tubes patients frequently suffered from abdominal uneasiness and pain, and later had to submit to a hysterectomy. Hence he had always removed the uterus also during the last two and a half years. In spite of lacerations and resections of gut, and rupture of the tubes during removal, he had had no deaths. He made use of an extensive incision, packed off the intestine, and then covered all the wound with gauze, as the spilling of pus very frequently led to an infection of the wound. Then he fixed the uterus with a volsella, worked down on the easier side, cut across the cervix, and attacked the more difficult tube from below. Occasionally he had separated each tube in turn, and then dealt with the uterus as in an ordinary hysterectomy. Only twice had he bisected the uterus, and sometimes he had separated down the bladder and cut across the cervix first before freeing the tubes. Of the difficulties in the operation the adhesions to the intestine were the most serious. If only one loop was involved he resected it. The appendix was frequently removed, and on one occasion he had to excise the caecum. As a rule he closed up the abdominal wound. Occasionally he drained through the vagina by means of a glass tube surrounded by gauze. In the after-treatment he was absolutely convinced of the benefits of continuous saline infusion.

Sir HALLIDAY CROOM agreed with Dr. Munro Kerr on all points.

Dr. BARBOUR agreed with the general principles, but asked how far they were to go in carrying them out. He had never had to remove a uterus for malignant disease after the removal of a malignant ovary. With papillomatous growths the secondary deposits were more likely to be found in the peritoneum. In pyosalpinx was the uterus to be removed for fear of leaving septic material, or to make the operation easier, or to prevent subsequent discomfort from chronic endometritis and adhesions? With a large double pyosalpinx they were often forced to remove the uterus. Was the risk of infection in acute cases not increased by opening up the cellular tissue of the floor of the pelvis?

Dr. BREWIS said the procedure in malignant disease should be radical; the end results were better if the ovaries and uterus were removed. Undoubtedly metastatic deposits did occur. In bilateral ovarian carcinoma the prognosis was bad because the disease was often metastatic from the stomach and intestine. In pyosalpinx the majority of cases were gonorrhoeal, and the other sites of the disease were the cervix, Bartholinian ducts, and Skene's tubules; hence removal of the uterus was not so essential. In tuberculous cases, however, the endometrium was liable to be affected, and the removal of the uterus was called for.

Dr. FORDYCE had recognized the benefits of going down on the easy side, cutting across the cervix, and separating the second tube from below. The bowel had great power of recuperation. If a large raw surface was left on the posterior surface of the uterus, it was difficult to obtain a peritoneal covering; in such a case he always removed the uterus also. In malignant disease of the ovary it was not so essential to remove the uterus. The secondary deposits were usually in the peritoneum.

Dr. SCOTT CARMICHAEL said the internal secretion, attributed to the uterus by Bond, Doran, and others, had not been experimentally corroborated. He agreed that the uterus was of no use without the appendages, and its removal greatly facilitated the operation for pyosalpinx. Strongly adherent bowel should be resected owing to the risks of post-operative paresis and even rupture. Continuous saline irrigation, with the patient in the Fowler position, was one of the greatest advances of recent years, and should be practised after all severe intestinal operations.

After the PRESIDENT had, in the name of the society, thanked the author for his paper, Dr. MUNRO KERR said that malignant disease of both uterus and ovary was uncommon. In cases of ruptured pyosalpinx, the operation must be finished as quickly as possible, and the cellular tissue was not to be opened up. In these rare cases the removal of the uterus was contraindicated.

Uterus Bicornis.

Dr. B. P. WATSON read a paper on two cases of uterus bicornis.

The first case was discovered accidentally while he was clearing out an incomplete abortion. The vagina was incompletely divided into two by a fleshy band running from its anterior to its posterior wall. The cervical canal was single, but the os externum was divided into two halves by a mesial band. A finger could be passed into each cavity, and the other hand on the abdomen could be passed down between the two divisions of the body to the os internum. Menstruation had always been regular and no flow had occurred during a previous pregnancy. The second patient had had three full-time children. At her fourth labour the placenta had to be separated by the hand, and then a swelling was found to the left of the pregnant half of the uterus. Again the division extended to the os internum. At a later date the sound was passed into both cavities, one of which lay in front of the other. There was no trace of a vaginal septum.

In both cases the non-pregnant half was enlarged and the os externum patent. As a rule such a condition interfered little with labour, though there might be retardation of the presenting part by the recto-vesical peritoneal band. There was a considerable risk of mistaking the second horn for an extrauterine pregnancy.

Sir HALLIDAY CROOM described one case in which a decidual cast of the non-pregnant horn was passed three days after a hydatid mole had been cleared out. He had twice mistaken the second horn for an extrauterine gestation. The symptoms were the same in both—haemorrhage, pain, and the passing of a decidual cast. In a fourth case, in which he removed an ovarian tumour during pregnancy, he found the uterus bicornuate.

Dr. BARBOUR said it was worthy of note that in neither of Dr. Watson's cases did menstruation occur during pregnancy.

Dr. FORDYCE asked if it was common for pregnancy to go to the full time in such cases.

The PRESIDENT said that he had seen one case in which both horns had been pregnant, and abortion had taken place from one. He diagnosed the second as intrauterine, because it became firmer during examination. In another case, the second horn was blocked and the menses retained; in another, ventrisuspension was done for retroversion; and in a fourth, in which the uterus was imperfectly developed, there was severe dysmenorrhoea, and the uterus had to be removed.

Dr. WATSON said that of 56 women with uterus bicornis who had been pregnant, 12 aborted every time.

Antenatal Lobar Pneumonia.

A paper by Dr. Alexander Don on a case of antenatal lobar pneumonia was read by the SECRETARY. At birth the infant coughed up a brown discharge. Breathing was laboured, and the lower half of the left side of the chest was dull. Death ensued, and a swab taken immediately after death showed pneumococci in large numbers. The mother and father were healthy.

Specimens.

The PRESIDENT showed a large nodulated tumour of the labium majus, partly fatty and partly fibro-cellular. All the lobules were infected and inflamed.

Dr. BREWIS showed: (1) Dr. Tristan's modification of Assilini's forceps; (2) a calculus removed from the bladder of a patient sixteen years after operation for pyosalpinx; the nucleus of the calculus was a silk ligature; (3) a cyst of Morgagni with torsion of the Fallopian tube; (4) double pyosalpinx.

THE ROYAL SOCIETY.

Thursday, March 10th, 1910.

Sir ARCHIBALD GEIKIE, K.C.B., President, in the Chair.

The Causes of the Absorption of Oxygen by the Lungs.

MR. C. GORDON DOUGLAS, B.M., and Dr. J. S. HALDANE, F.R.S., gave a short preliminary account of experiments affording clear evidence of a secretory activity of the lungs in the absorption of oxygen.

Action of Nicotine and other Pyridine Bases.

Mr. V. H. VELEY, D.Sc., F.R.S., and Dr. A. D. WALLER, F.R.S., made a communication on the action of nicotine and other pyridine bases upon muscle, and on the antagonism of nicotine by curarine. Nicotine (mol. wt.=162) as such, or in the form of salt as nicotine tartrate, produces a very characteristic effect upon the contraction of isolated muscle. Its toxic power upon muscle as compared with that of other substances dealt with was of the following order—that is, approximately one-third that of quinine, and considerably greater than that of curarine:

Aconitine	10,000
Quinine	100
Nicotine	33
Strychnine...	12
Curarine	5

The effect on muscle, characteristic of nicotine, was not produced by its parent base pyridine, nor by picoline, nor by piperidine. The order of toxicity upon muscle of these substances as compared with that of nicotine was as follows:

Nicotine	100
Piperidine	50
Pyridine	10
Picoline	10

As had been indicated by Langley, there was an antagonism between nicotine and curare. Using a solution of pure curarine iodide prepared by Professor Boehm, the authors found that the characteristic effect of nicotine upon muscle was abolished when the proportion of curarine to nicotine, reckoned by molecules, was 2 to 1, 30 to 1, and 160 to 1. With this last proportion a trace of nicotine effect could still be detected. In the case of other poisons—namely, strychnine, quinine, and aconitine, of which the effect *per se* upon muscle considerably exceeded that of curarine—there was, in a sense, an antagonism as shown by abolition of the characteristic nicotine effect; but the

abolition required a greater mass of these more powerful poisons than was sufficient in the case of the less powerful poison—curarine. Thus, approximately, whereas 1 molecule of curarine could overpower upwards of 100 molecules of nicotine, it required 1 molecule of strychnine or of quinine to overpower 1 molecule of nicotine, and 1 molecule of aconitine could overpower at most 10 molecules of nicotine. But in these cases the result appeared to be intelligible as an effect of subdivision of muscle stuff between two poisons, similar to the case of the subdivision of an acid between two bases. This explanation, however, was hardly applicable to the case of the antagonism of the strong poison nicotine by the weak poison curarine.

ROYAL SOCIETY OF MEDICINE.

LARYNGOLOGICAL SECTION.

Friday, March 4th, 1910.

Dr. DUNDAS GRANT, President, in the Chair.

Cases and Specimens.

THE following cases and specimens were exhibited: Mr. HERBERT TILLEY showed a case of *Removal of a rapidly growing soft fibroma from posterior wall of left maxillary antrum by Rouge's operation.* H. B., aged 48, complained of left nasal obstruction, increasing for twelve months. During the past six months there was frequent nose bleeding on that side, with discharges of glairy mucus. Examination showed that the posterior half of the left nasal cavity was completely filled by a dark red, very soft, and an easily bleeding mass of growth. Operation: Laryngotomy, plugging lower pharynx; incision under lip from right canine fossa to left malar process; division of anterior half of nasal septum from its lower attachment; turning up of soft parts; removal of left canine fossa and ascending process of superior maxillary; removal of growth and final replacement of soft parts, secured by a few interrupted sutures. The specimen, with sections, was shown. Dr. ALEX. R. TWEEDIE: *Face and mouth of a female infant, aged 3 months*, whom the parents found they were unable to feed properly on account of a deformity in connexion with the mouth. An operation was suggested, but before it could be admitted for such treatment it died in a marasmic condition. There was a complete congenital cleft of the whole soft palate, the left half of which lay in the position usually seen in such circumstances, but the right half was continuous with a membranous structure, which, commencing opposite the posterior border of the hard palate, was attached continuously to the inner side of the right cheek and extended downwards and forwards to the floor of the mouth, where it terminated in front of the right side of the tip of the tongue. MR. SOMERVILLE HASTINGS related a case of "*Bleeding polypus*" *of inferior turbinate*, and showed microscopic sections. On November 8th, 1909, a brass finisher, aged 42, came to the Middlesex Hospital complaining of epistaxis of a month's duration. Every time he blew his nose he was troubled by bleeding from the right nostril, which lasted about a quarter of an hour. When the nose was examined, a pedunculated growth about the size of a pea was seeing growing from the lower border of the right inferior turbinate not far from its anterior extremity. The tumour was purple in colour and smooth on the surface, and blood clot was adhering to it. On section, it was seen to be a soft angio-fibroma, in the delicate fibrous matrix of which were imbedded the characteristic oval endothelioid cells. It was bordered by squamous epithelium, and at one point where ulceration had taken place there was an infiltration with polymorphonuclear leucocytes; no mucous glands were present in the tumour, though abundant in the adjoining mucous membrane of the turbinate. Scattered through the growth were many spaces lined with endothelium, but, unlike the mucous sinuses, devoid of an investment of unstriped muscular fibre, some containing blood cells, others empty and probably lymphatics. Fibro-angeiomatous meshwork was well seen. The histological structure fell closely into line with the loose-textured fibroma type of the small angeiomatous tumours ("bleeding polypus of the septum") fully described by Pegler in the *Lancet*, November 18th and 25th, 1905, wherein that author cites Kreig, and Siefert and Kahn, as authorities for their occasional occurrence in connexion with the inferior turbinate.

[Dr. PEGLER said that the characters described above conclusively distinguished the tumour from a simple turbinal hypertrophy, and regarded the present example as probably the first of the kind recorded in this country.] Dr. E. A. PETERS: *Larynx, four rings of trachea, and part of thyroid gland and gullet removed during an act of suicide.* A painter, aged 29, subject to hallucinations and depression after bouts of alcoholism, cut his throat when sober at 5 a.m. He made a transverse cut down to the spine and two or three vertical cuts, one of which opened the larynx accurately in the middle line. The suicide seized the obstructing larynx, cut away the adherent gullet and trachea at the fifth ring, and threw the fragment exhibited into the garden. He walked 200 yards, and collapsed outside a friend's house, where he was discovered. The two doctors who saw him found it impossible to bring the trachea to the skin. Death of lung suffocation followed at 10 a.m. Dr. STCLAIR THOMSON: (1) Case of complete *Inspiratory stenosis of the larynx* in a man invalided from the army in India. There had been ulceration below the right vocal cord and complete aphonia. Later he became cyanosed, and tracheotomy was performed. The ventricular bands, red and swollen, occlude the larynx, and the larynx is generally bathed in pus. The case is probably syphilitic. (2) A case of unilateral suppuration of all four accessory cavities, which were operated on at one sitting with rapid recovery, in a man aged 21. Dr. D. R. PATERSON showed a cast of an upper jaw from a case of *Congenital occlusion of the right posterior naris.* Mr. NORMAN PATTERSON showed a cast of a woman, aged 23, in whom there was complete *Occlusion of the right anterior naris* by a web extending from the ala to the septum. Dr. WILLIAM HILL: Case of carcinoma of the gullet in a man aged 62, with demonstration of radium apparatus, and its insertion in the gullet by means of a special oesophageal tube designed by exhibitor.

SECTION OF SURGERY.

Tuesday, March 8th, 1910.

RICKMAN J. GODLEE, M.S., F.R.C.S., President, in the Chair.

Rupture of Tunica Vaginalis in Hydroceles.

MR. SOMERVILLE HASTINGS read a paper on rupture of the the tunica vaginalis in hydroceles. He had had three cases of this occurrence himself and had collected some seventy others from the literature. Generally the result of trauma, rupture might also happen as the outcome of muscular action or spontaneously. The ruptured tunica was rarely if ever normal, but was the seat of fibrotic or other pathological changes. As a rule, only the serous sac was torn, but the fibrous tunic might be involved. Diagnosis was pretty clear, as a rule, but extravasation of urine, elephantiasis, or erysipelas might be confused, and haematocele of the tunica vaginalis not only presented points of similarity but might also be ruptured. It was only rarely that cure of the hydrocele resulted from the rupture and in most instances a radical operation was indicated after the subsidence of most of the swelling. The PRESIDENT asked if any disease of the testicle had been noted in these cases; he thought the condition must be rare, and suggested that the condition which used to be known as "inflammatory oedema of the scrotum" was probably in some instances really a result of this rupture, but he thought it much more rarely seen nowadays than formerly.

Mr. HASTINGS replied that there was no disease of the testicle in his cases and no mention of it in reported cases.

Gastric Hypersecretion and the Appendix.

Dr. SOLTAU FENWICK read a paper on the clinical significance of gastric hypersecretion and its connexion with latent disease of the appendix. He had found that chronic hypersecretion existed in a large proportion of intractable cases of dyspepsia. As the result of extensive investigations in hospital and private practice, he had come to the conclusion that this hypersecretion was not a primary functional disorder of the stomach but a reflex expression of an organic lesion of the digestive tract or of some other important organ of the body. Whilst ulcers of the stomach and duodenum, gall stones and pyloric neoplasms were found in a considerable number of cases, many others were

due to associated disease in the appendix. Irritative conditions of the appendix such as ulceration of the mucosa or calculus were associated with hypersecretion, latent affections such as ensue from previous acute inflammations were often associated with a peculiar form of chronic gastritis, in which subacidity and an absence of free hydrochloric acid are the rule. Hypersecretion was also responsible for minute erosions of the gastric mucosa which might lead to severe haematemesis and melaena, and the principal symptoms of duodenal ulcer might be put down to the same cause.

Appendicular Gastralgia.

Mr. HERBERT J. PATERSON drew attention to the class of case with gastric symptoms which, as shown by American surgeons, were due to disease of the appendix. Ewald had described them as "appendicitis larvata." The author had had 24 such cases, in 17 of which gastric analyses had been made. Whilst epigastric pain was a constant symptom, the tendency for the pain to radiate to the lower abdomen served as a useful differential point from those in which the lesion was gastric or duodenal. In only a third of the cases was there tenderness in the iliac region as well as in the epigastrium. Haematemesis occurred in 5 of the 24 cases, melaena in 2, and vomiting in 15. Fifteen of the cases were operated upon under the mistaken diagnosis of gastric or duodenal ulcer. In all, a diseased appendix, but no lesion of the other viscera, was found. In 8 out of the last 9 of his cases he had been able to make a correct diagnosis of the appendix origin of gastric symptoms. Of the 24 cases, 17 were cured, 3 improved, and 4 unsatisfactory.

PATHOLOGICAL SECTION.

Tuesday, March 15th, 1910.

Dr. F. W. MOTT, F.R.S., President, in the Chair.

Gastric Analysis.

DR. W. H. WILLCOX, in a paper on the diagnostic value of the chemical analysis of the gastric contents after a test meal, insisted on the importance of a thorough examination of the gastric contents after a test meal in all cases presenting symptoms referable to the stomach which did not respond to ordinary medicinal treatment. He also was strongly of opinion that in every case on which an operation was contemplated for symptoms referable to the stomach, a preliminary examination of the gastric contents should be made in order that the diagnosis might be placed on a sure foundation, and also for the guidance of the surgeon at the time of operation as to the best course of procedure to be adopted, and as to whether a gastro-enterostomy was likely to be of benefit. Dr. Willcox excepted acute perforative lesions of the stomach and duodenum, since here immediate operation was imperative. Dr. Willcox pointed out that chemical investigations of the gastric contents were of value as supplemental to a careful consideration of the clinical symptoms and physical signs. The first step of the investigation was the careful and thorough clinical examination of the patient. By this means the diagnosis could be referred to possibly two or three conditions. In a large number of cases the clinical examination alone was insufficient for a certain diagnosis. The result of the analysis of the gastric contents in very many cases pointed to the true diagnosis, where by clinical examination alone two or more conditions were possible. Numerous examples were cited in which by means of chemical investigations a doubtful diagnosis was made a certain one, and where the course of procedure which should be adopted was clearly indicated thereby. A large number of analytical results in different gastric diseases were tabulated and shown.

The Pathology of Pernicious Anaemia.

Dr. F. H. THIELE had examined 15 cases of "pernicious" anaemia. He drew attention to the constant macrocytic characters of the red cells which occasionally persisted during periods of freedom from the disease. Megaloblasts were not of frequent occurrence, and were not characteristic. All intermediate varieties between the normoblast and these cells were met with. In two cases the blood, when first observed, had the characters of a secondary anaemia. The marrow in all cases was typical, as described by Professor Muir. From analyses of the liver, spleen, and kidney for the amount of iron, most of these organs showed a great excess. There were a few exceptions, and these had no relationship to the duration of the disease. The cases all showed marked alimentary lesions. Most had pyorrhoea, and changes in the tongue, stomach, and intestines. In a few cases a streptococcus was found in the vomit, spleen, and tongue. He regarded them as confirmatory of Dr. Hunter's views. He also recorded the pathological finding in two cases of aplastic anaemia. In both there was profound anaemia, but no megalocytosis, and no nucleated red cells. The white cells were greatly diminished, and showed a relative lymphocytosis. In both there was pyorrhoea with glossitic lesions. In one there was no excess of iron in the liver. In the other there was a large quantity in the liver, spleen, and kidneys. The marrow of the long bone shafts and epiphyses was yellow; in the ribs it was fatty in patches and contained no megaloblasts. He regarded this latter case as one of Addisonian anaemia of very rapid course without any haemogenesis.

Bile-producing Primary Carcinoma of the Liver.

Dr. F. PARKES WEBER exhibited an example of the above, in which a certain number of green plugs occurred between the cells, consisting of inspissated bile. The chief part of the growth was necrotic. The secretion of bile by a hepatic carcinoma was only what occurred, *mutatis mutandis*, in glandular carcinomata of certain other viscera—now a well-established fact.

Amyloid Degeneration in a Hepatic Adenoma.

Mr. S. G. SHATTOCK exhibited the above specimen, which was of interest as being the first demonstration of the occurrence of this particular degeneration in a new growth. The tumour itself was of large size, and in structure it closely resembled hepatic tissue. The hepatic substance itself, which was displaced over the growth, exhibited the same degeneration, the disease in this, as in the tumour, being confined to the vessels.

CLINICAL SECTION.

AT a meeting held on March 11th, Mr. A. PEARCE GOULD, President, who was in the chair, showed a case of *Detachment of the entire scalp.* The patient was a girl, aged 16, whose hair was caught in a machine and her whole scalp was torn off from the eyebrows to below the occiput; on the right side the loss of tissue included the upper half of the pinna. Repeated attempts at skin-grafting had been made, but with little or no success. There was a slight growth of epidermis over the lower part of the forehead and on each temporal region, but for the rest the entire calvaria was covered with irregular, pale, poorly developed and freely suppurating granulation tissue. Attempts were made to prepare the large, raw surface for grafting by antiseptic fomentations containing cyllin, carbolic acid, or boric acid, but it was not until water only was used that any marked improvement occurred. Since then Thiersch grafts were applied and the surface was now almost entirely skinned over; the patient had lost all her pain, and was now able to close the eyelids, which she could not do before. Three attempts had been made to hasten the repair of the scalp. Once the lining of a dermoid cyst was implanted, on another occasion a large flap of skin from the back of the neck was raised, leaving its ends attached, and after several days, when the circulation of the flap seemed to be assured, one end was detached and the flap laid over the skull; on the third occasion a large granulating surface was covered with skin excised from a large ventral hernia. All those attempts failed. The President called attention to the intolerance of antiseptics of any kind and in any solution and the good effects of the continuous application of sterilized water, and to the success obtained by Thiersch grafts. Two cases of *Obliterative endaneurismorrhaphy (Matas's operation) for popliteal aneurysm* were shown, one by Mr. MAYNARD SMITH and the other by Mr. HUGH M. RIGBY. The following were also shown:—Sir JOHN BROADBENT: A case of *Fibroid lung with displacement of the heart.* Mr. C. GORDON WATSON: A case of *Tibio-calcaneal resection at*

the ankle, with amputation of the foot. Dr. JAMES GALLOWAY: A case of *Spleno-medullary leukaemia with intercurrent erysipelas*, and a case of "*Trophic*" *dermatitis* commencing on the extremities. Dr. F. PARKES WEBER and Dr. R. H. NORMAN: A case of *Bluish haemochromatosis of the skin*, a case of *Exophthalmic goitre in a man with symmetrical telangiectases of the ocular conjunctivae*, and a case of *Congenital tumour in the left parotid region.* Mr. J. HOWELL EVANS: A case of *X-ray carcinoma.* Dr. H. C. TURNEY: Two cases of *Myatonia atrophica.* Mr. A. E. BARKER: A case for diagnosis, the patient being a female with a *Lump on the left upper gum.* It had spread across the hard and soft palate and over the left tonsil. A gland under the left angle of the jaw was enlarged. In spreading the growth could hardly be said to have ulcerated, but its inner border was raised and indurated, and its middle seemed to have lost substance. It looked like an epithelioma, but its long duration and the patient's age seemed to negative that view. Dr. THEODORE THOMPSON: A case of extensive *Myositis ossificans*, and a case of *Cervical ribs.* Dr. E. I. SPRIGGS: A case of *Acromegaly.*

MEDICAL SOCIETY OF LONDON.

At a meeting held on March 14th, Dr. SAMUEL WEST, President, in the chair, the subject of discussion was *Colitis.* Dr. H. P. HAWKINS, speaking of mucous colitis, said that the passage of mucus in masses or casts, preceded and attended by severe pain and constipation, with abundant evidence of tight spasm of the colon, generally on the left side, in attacks with long or short intervals of fair health which were marred only by constipation, formed a definite picture of a condition easily recognized. There was no form of colon disease so sharply defined. He was confident that such pure cases occurred in which there was no visible evidence of inflammation. *Post-mortem* observations had certified the absence of any visible lesion. The condition had a striking resemblance in all points to true asthma. The two conditions might occur and alternate in the same patient, and he thought they tended to appear in the same family stock. The real difficulty lay in the treatment of the patient between the attacks, and the difficulty was increased if the attacks occurred only at long intervals. Perseverance in treatment was not a strong feature in such patients. Constipation came first, and it required the usual line of treatment by diet, by a long course of abdominal massage, by exercises, and by the determined diminution and ultimate withdrawal of purgatives. He had faith in the use of olive oil, regulin, and agar-agar. He had never satisfied himself that the stringent coarse cellulose diet of von Noorden could be taken without great discomfort and flatulence. Above all, he felt sure that in those cases colon irrigation of all kinds should be avoided. In many of his cases, where the pain had been on the right side and there had been doubt as to its nature, the appendix had been removed. As far as he knew, there had never been any resulting improvement. But a large part of the treatment must be directed to the general neurasthenic state of the patient. An open-air life and regular graduated exercise under supervision and under the most healthy and cheerful surroundings afforded the best chance of improvement. That was easily provided, if only the relatives would consent to part with the patient for two months. Of one thing he felt sure, namely, that a rest-cure, with all that it meant in the way of isolation and nursing, was not to be recommended. He thought it was invariably a step downwards, and it robbed the patient of what little self-reliance she had. He sometimes saw patients who had had several rest-cures at various hands, and who looked upon a further series with complete indifference. Mr. STANSFIELD COLLIER related the details of a case of colitis, in which he converted an appendicostomy into a caecostomy. Dr. HALE WHITE insisted on the importance of the bowels being opened once a day in cases of colitis with constipation. Dr. J. C. MATTHEWS described vaccine treatment; Dr. S. P. PHILLIPS said the haemorrhagic forms, with little ulceration, were the most fatal; Dr. A. MANTLE explained the treatment adopted at Harrogate; Dr. DE HAVILLAND HALL was not enthusiastic over vaccines or appendicostomy, and Dr. C. W. BUCKLEY, of Buxton, observed that irrigation could be done at home as efficiently as at health resorts.

Rebiews.

THE CHEMISTRY OF BALNEOLOGY.

METHODS of treatment rarely yield such satisfactory results that the curative effects become evident whenever they are applied. Certain methods, however, yield the most striking results empirically, and are frequently employed by the charlatan. The medical practitioner often regards these with suspicion, with the result that he delivers many of them entirely to the quack. He thereby loses in a double way, because a useful remedy is neglected, and because the unqualified person gains a reputation in the eyes of the public which he, the medical practitioner, might have acquired. It should be the duty of the practitioner to use any and every useful therapeutic agent, both to benefit his patient and to deprive the quack of his illicit means of livelihood. Some of the methods referred to are to be found in the realms of hydrotherapeutics.

Spas are run as business concerns, and during the course of each year the practitioner undergoes a sort of bombardment by booklets, illustrated pamphlets, and other forms of advertisement, in which the claims of certain spas are set forth in most glowing terms. From time to time books dealing with a group of spas are issued by some interested company or body, and in many of these cases the advantages of the spas dealt with in the volumes are brought to the notice of the reader in a more cloaked manner. The illustrations are often works of art and the books are got up in such a way that the average man cannot easily make up his mind to throw them into the waste-paper basket. He keeps them, and after admiring the pictures a number of times, he begins to take a sort of personal interest in the places mentioned in the books, and, when that stage has been reached, the advertisers have gained their end. We have before us such a book on the spas and mineral springs owned by the Royal Prussian Board of Domains.[1] We have no intention of discussing the alleged merits of the few spas dealt with in this volume, and can only express admiration for the beautiful views, pictures and symbolic illustrations, with which the book is richly adorned. It is printed in English carefully, and, we would imagine, laboriously translated directly from the German. The sentences have a heavy rhythm, and in many instances a peculiar word is employed, albeit correctly. It must, however, be pointed out that there is little convincing in the letterpress with regard to the true action of these spas. Save in its bulk the volume does not differ materially from the usual booklets issued for advertisement purposes by the management of spas. There are no special characteristics which could recommend the book on scientific grounds. In vain the reader searches for some fresh evidence of the *modus operandi* of the special baths, waters, and procedures employed at these places; he merely learns that the waters contain so many grams of solid or gaseous constituents per kilogram or litre, and that the geographical, geological, metereological and balneological conditions prevailing yield special results.

Our attention has been directed to another publication, which stands in a totally different light, and contrasts strongly with the volume to which we have just referred. This work is a massive book, unadorned in so far as illustrations are concerned, and containing an almost terrifying amount of printed material. The *Deutsches Bäderbuch*[2] contains substance, while the *Album* contains padding. In the first place, the subject is dealt with from a scientific point of view, and each of its aspects forms the basis of a careful article; these articles are written by specialists, who have, according to the statement of the publishers, given their services gratuitously, in the interest of science. The essential value of the book

[1] *Album of the Spas and Mineral Springs owned by the Royal Prussian Board of Domains.* Described by order of the Minister of Agriculture, Domains, and Forests, by Dr. Stern, Royal Inspector of Baths, Langenschwalbach. Aix la Chappelle, 1909, Aachener Verlags-und Druckerei-Gesellschaft. Translated by Dan. Heuser, London. Coloured illustrations after original paintings and by Georg Geyer, Wiesbaden. Pp. 166. Price not mentioned.

[2] *Deutsches Bäderbuch.* Compiled, with the assistance of the Kaiserliche Gesundheitsamt, by a large number of Authors. Published by J. J. Weber, Leipzig. 1907. (Med. 4to, pp. 535; 13 graphic tables and 2 maps. 15s.)

depends on the treatment of spa waters in accordance with the doctrine of electrons.

The introduction contains several sections. The first, on geology, by Dr. Keilhack, gives interesting information with regard to the origin of the constituents of the spring waters, the cause of the temperature of the different springs, the forces which propel the waters from the interior of the earth to the surface, and the relations between the mineral water and the soil water. A few appendices on this subject are written by other authorities on geology. The second article, by Dr. Paul, deals with the chemical characteristics of the spring waters, to which we shall refer later. An appendix by Dr. Himstedt deals with radio-activity, and information available on this subject is given with all necessary moderation and reserve. The caution displayed is most praiseworthy, inasmuch as the temptation to explain all the obscure effects of the spas as the result of radio-active properties has been too strong for the managers of many spas. Many of them have yielded, and have built up theories which at present, at all events, are scientifically untenable. A further valuable contribution forms a second appendix, written by Drs. Hintz and Grünhut on the classification of spas. The third article is concerned with pharmacological investigations; and here again the modern doctrines in chemistry are accorded their proper significance. The author, Dr. Jacoby, does not hesitate to ascribe much of the good effect to the action of heat, and justifies his opinions by showing what the pharmacological action of the warm, hot, and cold bath, applied in various ways and under different conditions, really is. He also analyses the evidence as to the pharmacological action of the several chemical constituents, such as carbonic acid, acids, iron, sulphur, and other inorganic substances. Dr. Kraus has undertaken the clinical section, and seeks in clinical experience the connexion between theory and practice. His treatment of a highly controversial subject is judicious. The two concluding introductory chapters, by Dr. Kremser and Mr. Kauffmann respectively, on the meterological and national economical aspects of spas, are adequate.

The spas themselves are then dealt with in detail in groups; there is an introduction to each group, and all the analyses are given both in the old manner and in the newer. Lastly, mention must be made of the graphic tables, showing at a glance the composition of the waters of the various springs, and of the maps, one of which gives the geographical distribution of German spas, and the second the average rainfall for the German Empire.

By the newer manner of stating the results of analyses is meant that founded on the doctrine of ions. A substance in solution in pure water reduces the freezing point of the water in a definite manner; 1 mol is the number of grams which corresponds to the molecular weight of the substance dissolved in 1 kilogram of water, which depresses the freezing point by 1.85° C. For instance, 180 grams of grape sugar dissolved in 1,000 grams of water forms a solution with a freezing point of −1.85° C., and 30 grams of urea (having a molecular weight of 60) dissolved in a kilogram of water forms a solution with a freezing point of −0.93° C. In a similar manner the boiling point is raised. But if 1 mol of a salt —for example, sodium chloride—be dissolved in water, the freezing point is depressed to a greater extent. A mol solution of NaCl has a freezing point at −3.42° C. Now it is found that a solution of an organic substance like sugar does not alter the electric conductivity as compared with pure water. On the other hand, salts act as electrolytes, and conduct electrical currents. It was at first thought that the electric current induced the dissociation of the dissolved salt, thus charging the atoms with electricity. Charged atoms are known as ions, and, to keep to the example of sodium chloride, it was found that the chlorine ions moved toward the positive pole, and were charged with negative electricity, for which reason they were termed anions; the sodium ions, which were charged with positive electricity and moved toward the negative pole, were termed cations. The ions on coming in contact with the electrodes discharge their electricity, thereby assuming their elementary characters. Chlorine is recognizable as a yellow gas, and sodium by its decomposition of water with the liberation of hydrogen. Further investigation, however, showed that this ionic condition of salts in solution is produced without the assistance of an electric current. It can readily be proved that every solution of sodium chloride contains some free Cl ions and Na ions, as well as some NaCl molecules. Arrhenius was able to show that a solution of a salt which possesses a lower freezing point, a higher boiling point, and a greater conductivity for electricity than would be expected from its molecular concentration owes these characteristics to the fact that the molecules are split up into more numerous units, each of which acts like a molecule in determining these changes. The splitting up of an electrolyte into electrically charged ions is spoken of as electrolytic dissociation.

Electrolytes have another highly important and peculiar characteristic. They are capable of precipitating substances out of colloidal solution. For example, if a weak solution of sodium chloride be added to a colloidal solution of a metallic albuminate, precipitation of the colloid takes place. Such a method is at times employed to determine the existence of a true colloidal solution. This characteristic, however, is not of direct importance with regard to mineral waters, but it is possible that it may play some part in the interaction between the waters and the substances comprising the living tissues of the organism.

In the next place, it is necessary to form some idea of the significance of the various anions and cations in the solutions—first, from a chemical or physical aspect; and, secondly, in their relation to life. Both these matters are discussed in the introductions mentioned above, and the reader will feel that at last he is getting nearer to the truth; that at last he can really believe that even very small quantities of a salt in solution may have a definite effect on bodies immersed in the solutions, or bodies investing them. In order to understand as much as can be understood at present, it is necessary to turn attention to the laws of diffusion and osmotic pressure which are intimately associated with the action of salts in the ionic condition. The osmotic pressure of a substance in solution can be calculated from its molecular weight. Thus 180 grams of grape sugar in 1,000 grams of water will have the same osmotic pressure as 60 grams of urea in 1,000 grams of water. But here again the electrolytes take an exceptional position. The osmotic pressure of their solutions is considerably higher than would correspond to their molecular weights. Arrhenius's explanation holds good in this case also.

In the tables given in the book the older analyses have been translated into the terms and values of the newer doctrine. The analyses selected were those which had been accepted as reliable, and the names of Fresenius, Bunsen, von Liebig, and Fehling guarantee many of the figures utilized. It was, however, necessary to attempt to some extent to reduce all the various analyses to a more or less uniform scale, and in this great difficulty was experienced. Hintz and Grünhut decided, after careful consideration, on a definite plan with regard to atomic weights, to units of concentration, to constants for the specific weights of gases and coefficients of expansion, and so on. The tables are constructed so as to show (1) the gram weight per kilogram of each ion, whether these exist as ions or molecules; (2) the milligram-ion weight per kilogram, also applicable to substances in ionic or molecular condition; and (3) dealing only with the actually existing ions, the equivalent weights in milligrams per kilogram of the cations and of the anions. The sum of the last, which are called milli-mols, must be the same for the anions as for the cations. With regard to the anions, it was found necessary to calculate those forms which corresponded to alkali salts possessing a neutral reaction, owing to the fact that the majority of the mineral waters were not alkaline to phenolphthalein, and not acid to methyl-orange. This would mean that the OH ions were approximately equal to the H ions as in distilled water. The anions, therefore, selected were SO_4, HPO_4, HCO_3, HS, $HAsO_4$, etc. When distinct acidity was found, this was interpreted as being due to HSO_4. The authors supply details with regard to the formulae employed in calculating their values, but we must refer the reader to the original, if he desires information on this point. Such acids as boric acid, silicic acid, and titanic acid, were regarded as undissociated, since

measurements of conductivity to electricity showed that the quantity of dissociated ions was not measurable.

Mineral waters regarded in this light assume a different aspect than when viewed in the light of the older analyses. Even if the attention be directed solely to the question of tonicity toward the body fluids, it will at once be seen how many of the waters may exert a considerable effect by means of their special osmotic pressure. But this is, of course, only a part of the action, and while we are already in possession of many details with regard to the effect of charged ions on the living tissue, it is certain that the future will extend our knowledge in this direction and that the physiological action of many spa waters will be explained scientifically on the basis of modern chemical doctrines.

DISEASES DUE TO PROTOZOA.

THE manual of *Tropical Medicine and Hygiene*, Part I, *Diseases Due to Protozoa*,[3] written by Dr. DANIELS and Major WILKINSON, gives in a handy and succinct form a great deal of information, and will be very useful to medical men working in the tropics. Both the authors are men who have had a wide experience in teaching tropical medicine, and are well acquainted with the requirements of the student and the practitioner. The first two chapters deal in a general way with protozoa and sporozoa respectively; the next four with malarial fevers; then come some chapters on blackwater fever, piroplasmosis, and yellow fever, after which a general account of the flagellata is given; this is followed by chapters on human trypanosomiasis, kala-azar, oriental sore, relapsing fever, tick-fever, and diseases due to spirochaetes in the tissues. The last chapter is on intestinal diseases due to protozoa, especially amoebae, and the book concludes with five appendices on dates and measurements and on the classification of diptera and ticks. The work is illustrated throughout by diagrams of protozoa and insects, temperature charts, photographs of patients, and by two coloured plates of blood cells and parasites. Each disease dealt with is fully described as regards distribution, clinical course, etiology, treatment, and prevention.

While this book will doubtless be very useful to the medical men for whom it is primarily or solely intended, it is to be regretted that the portions dealing with protozoa generally contain mistakes, and give the impression of having been hastily compiled. We observe a number of misstatements which, while they do not impair appreciably the value of the work as a whole, are blemishes that should be removed from a later edition. Thus the word "merozoite" is not simply a synonym of the word "spore"; any minute division-products resulting from a process of sporulation may be termed "spores" in a general way, but a merozoite is a spore produced by the sporulation of a non-sexual schizont. It is not clear what the authors mean by the statement that "all parts of the cell enter into the formation of the flagellum." The ookinete of a malarial parasite is not known as a zygote *after* it has become encysted; it, or any other gamete, whether a protozoan cell or a metazoan ovum, is termed a "zygote" the instant it has undergone fertilization or sexual union with another gamete. It is stated of gregarines that their cell contents "have been shown in rare instances to undergo division into spores," but, as a matter of fact, this phenomenon is one of the commonest and most easily observed in the whole range of the protozoa. The neosporidia are dismissed with the remark that "they are not known to cause any human disease," but the authors seem to have overlooked *Rhinosporidium kinealyi*, originally discovered by Major O'Kinealy, I.M.S., in tumours of the septum nasi in Calcutta. In the chapter on flagellata the authors appear to be describing the structure of a trypanosome when giving an account of the organization of flagellates generally; but, even if their description be understood in this limited manner, it is quite incorrect to say that "the nucleus is not vesicular, and contains abundant chromatin, which is diffused throughout it." This statement merely describes the misleading and utterly false appearance produced by the Romanowsky stain; the authors do not appear, however, to recognize the defects of this method of staining, or they would hardly have used it for the specimens of *Amoeba coli* depicted on the first plate, giving what can only be described as caricatures of the structure of this parasite, without exhibiting any of its more characteristic features, such as the eight-nucleate stage, for example. In the varied nomenclature of the smaller chromatic body of a trypanosome the name "kinetonucleus" is not mentioned, though this word is used two pages further on, and frequently afterwards. The statement that *trypanoplasma* has no undulating membrane is erroneous. These lapses from accuracy suggest the reflection that the authors would have done better to have attempted less in the matter of scientific treatment of the protozoa and to have confined themselves more to the main purpose of the book—namely, to provide a useful manual for the medical man.

[3] *Tropical Medicine and Hygiene.* Part I. *Diseases Due to Protozoa.* By C. W. Daniels and E. Wilkinson. London: John Bale, Sons, and Danielsson, Ltd. 1909. (Demy 8vo, pp. 270, 62 text figs., 2 coloured plates. 7s. 6d.)

DIETETICS.

THE pamphlet, entitled *The Value of an Exclusive Proteid Diet in Certain Digestive Disorders*,[4] is a reprint of a lecture that appeared in the *Clinical Journal*, and is devoted to the advocacy of an exclusive meat diet—namely, minced meat and hot water—in the treatment of various digestive disorders. Dr. ERNEST YOUNG is right in saying that its value in this particular class of disease has not been sufficiently recognized by the profession and was almost ignored by its originator, Dr. Salisbury. The quantities he recommends are 2 oz. of minced meat given three times a day, with an interval of five hours between each meal, and at an interval varying from half to three and a half hours after the meals a pint of hot water is to be sipped slowly. He recommends this treatment in marked atony and dilatation of the stomach and in chronic hyperchlorhydria. Although the value of this diet in the management of many cases of stomach diseases is indisputable, we can hardly agree that it contains "a maximum of nourishment with a minimum of weight and bulk," for as a fact the amount of nourishment contained in it is extremely small. One ounce of meat gives about 35 heat units, so that three meals of 2 oz. each would not give more than 215 heat units, and if we double this the amount is still extremely small as compared, for example, with 1½ pints of milk given in small quantities of 2 oz. at a time, as is often done in the treatment of stomach diseases; this would yield 510 heat units. He recommends that this diet should be continued for from one to six weeks before the addition of any starchy food is allowed, but for such an extremely low diet this seems too long, and experience proves it to be unnecessary. We are quite unable to follow him in his remarks about rest, for on such a diet the patient should be in bed. In describing the method of preparation of the diet he lays great stress upon a particular make of mincer and griller. As a rule we do not like to see such recommendations in medical books, and doubt there being any special merit in this case to justify a departure from it. We note "zwieback" is spelt "zweiback," and "Priessnitz" appears as "Priestnitz," and when the author says "the hot water will tend to cleanse away existing catarrh and help to dissolve, and so render easy of elimination, any toxic material *in the blood stream*," we could have followed him better if he had written "in the intestine."

Professor GILMAN THOMPSON'S book on *Practical Dietetics*,[5] first published in 1902 (see JOURNAL, January 17th, 1903, p. 143), has reached a fourth edition. He states in the preface that the present edition has been completely rewritten, and that seventy-five pages have been added to the text together with forty-two new illustrations. The book, as was said seven years ago, is a compendium of useful information gathered from many sources, but it contains little original matter, and the author has not always chosen the best authorities. The most useful part is that in which the dietaries of hospitals and institutions, of the United States army and navy and of various prisons, as well as those followed by athletes at

[4] *The Value of an Exclusive Proteid Diet in Certain Digestive Disorders.* By Ernest Young, M.D. London: Medical Publishing Company, Limited. 1909. (Cr. 8vo, pp. 23. 1s. 6d.)

[5] *Practical Dietetics.* By W. G. Thompson, M.D. Fourth Edition. New York and London: D. Appleton and Co. 1909. (Med. 8vo, pp. 928; 45 illustrations. 21s.)

some of the American universities, are given. Although so much use is made of other writers, there is no bibliography and there are no precise references in the text. As to the revision, we notice that the mistake has not been corrected in the table of the chemical composition of fungi (p. 224), where "non-nitrogenous" should be "nitrogenous"; "seltzers" still stands for "selters"; "Kissengen" for "Kissingen" (p. 245); "Ufflemann" for "Ueffelmann" (p. 330); "Granger Stewart" for "Grainger Stewart"; Dr. A. G. Barrs is given to London instead of Leeds (p. 475), and Sir Andrew Clark has a final "e" to his name (p. 723), while the inaccurate analysis of Soya bread is repeated (p. 752). Attention might have been paid to what Dr. Pavy has published about a diabetic food of Rademann of Frankfort which does not support the statement that it contains only 12 per cent. of carbohydrates. We should have been interested if Dr. Thompson had been able to tell us something about the results of the various systems of diet which have been so loudly advocated in America and appear to be popular there, but on these subjects he is reticent. He does not mention purin-free diets in the treatment of migraine and gout, nor does he refer to the subject in discussing the dietetic value of animal viscera. His drawings of the tea and coffee plants are not good, and in both cases there is a mistake in the lettering. A full table of wines, beer, and spirits, showing their alcoholic and sugar contents would be a useful addition. The table giving household measures and their equivalents in ounces, grams, and calories, is useful, but it might have been fuller.

SURGERY.

THE fourth volume of the *American Practice of Surgery*, edited by Drs. BRYANT and BUCK, consists of the final chapter of Part XIII, on Dislocations; of Part XIV, on Operative Surgery; and of Part XV on Orthopaedic Surgery.[6] The Section on Dislocations reviews the subject in 104 pages, and its illustrations comprise twenty-three radiographs. The discussion of the various methods of reduction is sufficiently full to be of value for reference, and the author, Dr. Emmet Rixford, considers critically the choice of method in each case in a useful manner. Criticism of the author's recommendations is hardly the function of a reviewer in the case of a volume of this kind, but it is necessary to remark that the suggestion that Kocher's method of reduction of a shoulder dislocation is an exceptionally dangerous procedure in average cases is one contrary to the experience of many. This chapter is certainly successful, well balanced, sufficiently illustrated, and practical. Part XIV consists of nine chapters on different matters of technique. It forms a compressed treatise on operative surgery, and as the plan of the *System* is to present a complete survey of surgery, we suppose its inclusion was inevitable. The chapter on amputations and disarticulations seems like an old friend, as the majority of the illustrations are from the textbooks of Treves and Jacobson. Plastic surgery is liberally treated, and the author of the article, Dr. James A. Stone, reviews a large number of formal methods. Excisions of bones and joints, and the ligature of arteries and veins, naturally form the subjects of chapters in this part, and others deal with minor surgery, contraindications to operation, preparation for operations, and local and general anaesthesia. The article on local anaesthesia is the most attractive of the group. By far the most interesting part of the volume, however, is that on orthopaedic surgery. Dr. C. F. Painter writes on congenital dislocations and infantile paralysis, Dr. G. D. Stewart on torticollis, Dr. Royal Whitman on deformities of the lower extremities, and Dr. Clarence Starr on tuberculosis of the vertebrae. All these articles maintain a high level of excellence, and are admirably illustrated. A notice of the fifth volume has already been published (BRITISH MEDICAL JOURNAL, 1909, vol. i, p. 1012). The sixth volume, which has recently been issued, contains some articles of great value and importance; but there seems to be some tendency to padding, and moreover, a certain displacement of some subjects which, in a work composed of several heavy volumes, is likely to be found inconvenient. For instance, in the article on gonorrhoea urethritis, which takes up nearly 100 pages, we find a full description of urethral stricture and its treatment, and also full notice of both acute and chronic prostatitis. Spinal and thoracic surgery are treated together; and after a study of a series of articles on regional surgery, from diseases of the mouth to the male genital organs, the reader is suddenly brought up by an article on diseases and injuries of the jaws. In the first and second articles, which in some respects may be regarded as the most important in this volume, the prosthetic skill and the devotion to special work of the American expert are well shown by Drs. Turner and Mosher. The latter has contributed an article on the diseases of the nasal cavities and the accessory sinuses, which, from the very able and thorough manner in which it treats a somewhat neglected subject, may be regarded as unique.

The ponderous volume in which Professor LESER'S sixty lectures on regional surgery are enshrined has reached its ninth edition.[7] The fact speaks a great deal for the esteem in which his teaching is held by his countrymen. It is the more remarkable because regional arrangement is not suited to textbook requirements unless rigid restrictions are imposed by the author on repetition. It must be admitted that even in the 1400 pages he has allowed himself for his second part Professor Leser has neither achieved completeness nor escaped redundancy. Those are faults inseparable from the compilation of a book out of lecture materials, but the text has, at the same time, the easy flow of fluent speech and is read with almost too great facility. There is, moreover, one quality about these pages seldom found nowadays—namely, a continuity of style and a consistency of idea only to be obtained when the whole of so great a mass is the work of one hand. Many recent advances in surgery, inadequately described in the edition published eighteen months ago, now receive further attention. Peritonitis, although it is viewed in the light of Wegener's researches, is even yet not treated by the methods—the logical outcome of those results—which we owe to the acumen of American surgeons. In describing operative treatment of the enlarged prostate, scant justice is done to the suprapubic route, whilst the method and special tractor devised by Young are still attributed to the "American Surgeon Chould"! The practitioners and students to whom the work is addressed will find the paragraph devoted to modern abdominal and abdominoperineal methods of operating on rectal carcinoma inadequate. The proper function of such a book is to offer a pleasant means of revising one's general knowledge by the light of a distinguished surgeon's wide experience. It is not a book for first reading of a new study. The index is better than in many German textbooks.

NOTES ON BOOKS.

OF the views expressed by Dr. WALTER WALFORD in *Cerebral Congestion and Tight Neck Clothing*,[8] some account has already appeared in these pages (see BRITISH MEDICAL JOURNAL, vol. i, 1909, pp. 1100 and 1336). In the pamphlet with this title his theory is further explained, and the fashion of its origin in a personal experience set forth. He finds reason to believe that many cases of headache, vertigo, sickness, and obscure ill-health, apparently due in some instances to severe functional disorder and in others to serious organic degenerations, are not seldom in reality the outcome of slight cerebral congestion brought about by the wearing of tight neck clothing. He gives a number of interesting examples in which relief was rapidly obtained after adoption of the opposite course, and though perhaps not every reader will be convinced the remedy is so simple that this pamphlet is worth perusal.

The *Bulletin* of the Sleeping Sickness Bureau for February, 1910, edited by Dr. Bagshawe, the Director, is chiefly devoted to technical papers on trypanosomes of animals, but in addition there are three very important papers, (1) on *Glossina palpalis*, a summary of recent information, (2) on the diagnosis of human trypanosomiasis, and (3) the influence of other infections on trypanosomiasis.

[6] *American Practice of Surgery*, vols. iv and vi. Edited by Joseph D. Bryant, M.D., LL.D., and Albert H. Buck, M.D. New York: William Wood and Co. 1908-9. (Imp. 8vo, pp. 1010 and 924; illustrations 736 and 433 respectively.)

[7] *Lehrbuch der Chirurgie.* II Teil. *Die spezielle Chirurgie in 60 Vorlesungen.* Von Dr. Edmund Leser. Jena: Gustav Fischer. 1909. (Sup. roy. 8vo. pp. 1418; 435 illustrations. M. 24.)

[8] *Cerebral Congestion and Tight Neck Clothing.* By Walter G. Walford, M.D.Durh. London: H. K. Lewis. (Demy 8vo, pp. 26. Price 1s. 6d. net.)

The study of the life-history, habits, and sites inhabited by the tsetse fly is considered by many to be the chief factor in all preventive methods to be adopted for the stamping out of sleeping sickness, and further work is certainly required on the fly. As regards the spread of sleeping sickness in other regions than Uganda, it is disquieting to note that one or two cases in white people have recently cropped up on the West Coast of Africa. It does not, of course, follow that the disease is becoming more prevalent in these parts; it may be that diagnostic methods have improved, and that cases are now detected that were formerly missed. Still two medical officers are being sent to the Gold Coast Colony on sleeping sickness duty in addition to Dr. Kinghorn, an expert from the Liverpool School of Tropical Medicine, and this certainly must be taken to indicate that there is plenty of work awaiting them there.

MOTOR CARS FOR MEDICAL MEN.

Recovery of Tax on Petrol.

V. inquires whether he can recover the petrol tax paid during the last twelve months, and, if so, to whom he should apply.

*** Tax can be recovered on all petrol purchased and used prior to December 4th, 1909, provided that a certificate can be obtained from the trader who supplied the spirit to the effect that tax has been paid thereon. Application for the repayment should be made to the local officer of customs and excise, who will supply the necessary form. The tax was levied on all spirit imported after April 30th, or manufactureed in the country after June 1st.

Motor Car for Town Doctors.

A Town Doctor would be glad to hear what are the advantages and disadvantages of a motor car for town work as compared with those of a brougham. At present he keeps a single brougham, two horses (one for morning and one for afternoon), and a coachman, which cost him, apart from rent and rates, on an average £190 a year. This sum includes renewal of horses. He thinks of changing to a 15-h.p. landaulet. This power would be required, because the roads are somewhat hilly. Apart from initial cost, will the upkeep be more than that of a brougham as stated, it being assumed that the miles run will be 3,500 a year? Do frequent stops—20 to 25 a day—and the turning in narrow streets give trouble? What should the "over all length" of the car be to be most satisfactory? If he changes he would like to go in for a good type of car, one likely to have as few breakdowns as possible, and he will be glad of suggestions as to size and cost.

The Advantages of One-cylinder Cars.

T. writes: After many years of motoring with all types of vehicles, I should like to urge a plea for the single cylinder car except in those cases where a covered car to hold several passengers is required, or where expense is no object. I have now reverted to a single cylinder two-seater, de Dion engine, and am delighted with the result. I had hitherto believed that single cylinders were difficult to start, that these engines had no flexibility, and that gear changing was frequent. My car starts more easily than most multi-cylinders (frequently at the first pull and always without flooding carburettor), the engine is very flexible, and with moderate gearing gear changing is infrequent. On a main road here in Kent I can do twelve miles in a straight direction on top speed. As to the obvious advantages as compared with multi-cylinder cars, the cylinder can be taken off in half an hour, there is only one pair of valves to attend to, and apart from washing the car, it will run for months without tinkering or adjustments. Finally, when the day of overhaul comes, which in a multi-cylinder car is a thing to dread, the time and money required for such and replacements need not be a serious matter even to the man of very moderate means; also, owing to the light weight, tyres last longer and cost less to replace. In this neighbourhood there is an increasing tendency on the part of men using cars for business to revert to single cylinders, and they can now be purchased up to 12 to 16-h.p., and to do fifty miles an hour and more on level (if required).

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

The quarterly meeting of the association was held on February 24th at the newly-erected Leicestershire and Rutland Counties Asylum, Narborough, near Leicester, by the courtesy of its Medical Superintendent, Dr. Rothsay C. Stewart. The President (Professor W. Bevan-Lewis) occupied the chair, and there was a good attendance.

Electric-bath Treatment in Mental Disorder.

Mr. Mackenzie-Wallis, B.Sc. (University College, Cardiff) and Dr. Edwin Goodall (Cardiff Mental Hospital) read a paper on electric-bath treatment in 120 cases of mental disorder, the former discussing the chemical aspect and the latter the method of electrical stimulation employed and the more general clinical results. The treatment extended over a period of nine years. As a result of their experience, the authors expressed their preference for the use of the alternating sinusoidal current in the bath with rhythmic variation, as against the usual faradic and galvanic methods. They described the course of the baths, the kinds of mental disorder treated, the weight of the patients at different stages, the diet, and the results. As a rule those who were mentally improved gained in body weight at the same time; the cases which did not improve remained stationary or lost in weight. For purposes of comparison, particulars of the results in a series of cases, controls, treated by ordinary warm baths, without current, were given. The greater part of the paper dealt with an inquiry into the influence of electric and warm baths upon the metabolism of the body, as shown by excretion of creatinin in a series of patients who were kept during the investigation on a fixed diet. The conclusions were that previous to the treatment the excretion of creatinin in all cases showed a minimum value for the total daily volume. The electric baths were given daily for single and recurrent periods, and during this time the creatinin-figure was markedly increased. Long-continued treatment with the baths tended to cause a marked fall, even below the former value. Warm baths, on the other hand, had little or no influence on the excretion of creatinin. This evidence was believed to be in accordance with the clinical facts as regards the improvements in the patients' mental and physical condition. The excretion of creatinin in the urine showed the normal variations with age, weight, and sex. The variations in the volume of the urine seemed to be very characteristic of the insane, as also was the great proneness of the urine to bacterial contamination.

The President said the authors had taken the hydro-electric treatment of mental disease out of the region of pure empiricism and had placed it upon a plane of scientific investigation. He asked whether it was regarded by the latest authorities that the amido acids were the necessary precursors of urea formation during protein metabolism in the tissues, especially in the muscles, and if the creatinin in the urine was simply the surplus of those precursors, which were eventually converted into ammonia and carbon dioxide, and so passed the liver and the kidney as urea. He wished to know whether there was a more simple mode of splitting off, as has been suggested by Drexell's experiments. He asked whether recent research upheld that possibility, because he had never yet seen a reply to Halliburton's question that if the amido acids were precursors of urea decomposition from proteid metabolism, why did not one find them more freely escaping into the blood, and passing on into the liver in ordinary metabolism in the forms of leucin, glycosin, and creatinin in greater abundance?

Dr. Percy Smith said that prolonged tepid baths were used in St. Bartholomew's Hospital many years ago for excited patients, and as a result they nearly always became calmer. Those patients also gained weight and slept better, and they eventually recovered. He was glad to hear that short baths were preferable to long ones. In those days there were no sinusoidal current baths. He would have liked to hear of a larger series of cases not so treated for purposes of comparison—that is, treated by simple warm baths. It occurred to him whether the creatinin was the elusive toxin at the basis of insanity which so many people seemed to be searching.

Dr. Scott Williamson said the attempt was the first of its kind in the annals of British psychiatry to grapple with the question of functional modifications in the insane. Observers were working on it in America, but even there there were not many engaged in the inquiry, so that the present research was supremely welcome. Some time ago he made some observations in cases of phthisis who were all undergoing sanatorium treatment, as a result of which some were increasing in body weight, but the creatinin did not vary at all with that increase in body weight.

Dr. Bedford Pierce said the treatment had been tried at The Retreat, York, on a considerable number of patients, and the general result seemed to be satisfactory. But the creatinin excretion was not scientifically tested,

so that only the general appearance of the patient gave that impression.

Dr. STODDART said that at Bethlem Hospital they were rather behind in that treatment. But he asked whether it was a good thing to get rid of creatinin. Was that substance a poison to the body? Also, did the sinusoidal current increase the creatinin excretion of normal people? His experience of warm baths was practically the same as that of Dr. Percy Smith.

Dr. HUBERT BOND read a communication by Dr. Robert Jones, of Claybury Asylum, in which the author said that he had tried the electric bath mostly for adolescents, chiefly exhibiting melancholia, and the main difficulty lay in getting them fed. It was not a very curable form. After consultation with Dr. Lewis Jones, he tried it upon 18 male and 5 female patients. The latter all improved greatly in health, even though two of them were phthisical. The treatment was also used in several cases of puerperal insanity, and greatly aided their recovery. Of the 18 men 9 had left the asylum, all had gained weight under the treatment, some many pounds. As a conclusion, Dr. Jones recommended the treatment in the melancholia of adolescent and in apathetic cases. The authors replied on the various points raised.

Typhoid Carrier Infection.

Dr. G. SCOTT WILLIAMSON read a paper on typhoid carrier infection, stating the results of his investigation into cases in which patients had had typhoid fever sometime ago, and who were found still to have the bacillus in a motile and active form in the body, these bacilli being capable, on inoculation into animals, of setting up the disease.

The CHAIRMAN alluded to the case of the man mentioned by Deane who, twenty-nine years before, had had typhoid fever, and the bacilli were found in his excreta in a motile form. At one of the asylums an outbreak of typhoid fever was eventually traced to an old woman, aged 75, a dement, very dirty in her habits, who was found to have the bacillus in a virulent form.

Dinner.

In the evening the members of the association dined together at the Royal Hotel, Leicester, where the guests included the Mayor of Leicester, Mr. Blakesley, Mr. C. J. Bond, Dr. McAllister-Hewlings, Dr. Langworthy Laurie, Mr. Rowlatt (Under-Sheriff of the County), and Dr. Astley Clarke.

THE Medical Graduates' College and Polyclinic held its annual general meeting at 22, Chenies Street, W.C., on March 11th. The report and balance sheet for the year 1909 were read, and the President, Dr. Theodore Williams, who was in the chair, said there was no doubt that the work done by the Polyclinic was excellent, and the members were very grateful to the different gentlemen who had contributed so many admirable lectures and demonstrations. With regard to the finance there was a considerable increase in the number of members, and no less than 174 subscribers had increased their subscriptions; a legacy of £300 from the late Mr. Alfred Philipps, who had taken the greatest interest in the library. Dr. C. O. Hawthorne, Chairman of Council, asked the members to contrast the position of affairs at the beginning of 1909 with that at the beginning of 1910, and they would be impressed with the striking change which had come about. In January, 1909, the college was practically closed, no programme of lectures and demonstrations had been issued, and no requests for annual subscriptions had been made, and no Council could be found willing to accept the financial responsibility of conducting the institution. But the Polyclinic was now in full operation, and its activities had been considerably extended. The college wished to provide instruction in the subjects in which the medical practitioner might desire to gain further experience, and had partly succeeded already. Among the practical classes established were two in the use of the cystoscope and sigmoidoscope respectively. The laboratory had been continued, and means for providing and dealing with vaccines had been added. The scheme of the Polyclinic was a most excellent one, and it could meet without dismay competition from any quarter. Dr. Dundas Grant, the treasurer, said the negotiations with Sir Jonathan Hutchinson had been very satisfactory, and a great debt was owing to Dr. Hawthorne for his tact and energy.

LITERARY NOTES.

MR. PUNCH, in his issue of March 9th, delivers himself of the following mild joke:

A candid critic, says the *Daily News*, comes forward in the BRITISH MEDICAL JOURNAL with strong views on the London Matriculation English.

This critic, says *Punch*, is then quoted as follows:

The student is driven to go to the examiner to be taught the snippets of information which are the stock in trade of he who aspires to win the so-called competitions.

Our facetious contemporary continues:

We can mention one snippet of information which this writer might well have been taught.

We can mention another which Mr. Punch himself might profitably learn—that is, to verify his references. The grammar of the passage as it stands in the BRITISH MEDICAL JOURNAL of February 26th, p. 516, is correct enough to satisfy the critical taste of Mr. Punch. We cannot hold ourselves responsible for errors due to passage through the refracting medium of the *Daily News*.

In the JOURNAL of March 12th we gave instances of medical men who were useful to politicians as carriers of gossip or as natural mediums of communication. In the *Retrospections of an Active Life*, by John Bigelow, Envoy Extraordinary and Minister Plenipotentiary to the Court of France from 1865 to 1867, it is stated that Napoleon III and other sovereigns of that time made great use in that way of Dr. Evans, the American dentist of Paris. Mr. Bigelow writes to Mr. Seward:

I ought to advise you that it sometimes happens when the crowned heads of Europe wish to communicate with one another without any responsibility, they send for Evans to fix their teeth.

It may be remembered that Dr. Evans helped the Empress Eugenie to escape from France in September, 1870. Like everybody else nowadays he wrote his reminiscences, but they give one the impression that all the most interesting experiences of his life are suppressed.

In an extract from a book, entitled *Etudes sur les médecins numismates*, by Dr. Renauldin (Paris, 1851), quoted in the *Echo Médical du Nord* of February 13th, we find a record of an adventure which befell Jean Vaillant. Born at Beauvais in 1632, Vaillant became an enthusiastic collector of ancient coins. So great did his fame become that Colbert invited him to travel in search of rare coins for the King's collection. He visited Italy, Sicily, and Greece, bringing back a number of rare and precious coins. At that period cruising about the Mediterranean in unarmed vessels was unsafe, as Algerian corsairs were always hovering about. This was the cause of the numismatist's mishap. Having embarked with the intention of returning to Rome in 1674, he was captured by pirates and held prisoner in the town of Algiers four months and a half. At the end of that time a score or so of gold medals and 200 silver coins found in his luggage were restored to him, and he was set at liberty. Two days after he left Algiers the captain of the ship told him they were being pursued by pirates, and Vaillant in his eagerness to save at least his gold medals, swallowed the lot. A change in the wind saved them from the pirate, and they reached Marseilles. Then the question arose, What was to be done about the medals? They caused the unhappy numismatist great inconvenience, owing to their weight, which was estimated at 6 oz., equivalent to 21.354 grams. Vaillant consulted two physicians, who—as is said by evil-disposed persons to be the wont of doctors—disagreed as to the right way of dealing with the situation. Nature, however, came to his aid, and by the time he reached Lyons he had got rid of more than half his precious burden. He went to call on a friend, Sylvestre Dufour, himself a great collector of coins, and told him about the case, describing those which still remained locked up in the hiding place he had chosen. Among them was a medal of the Emperor Otho, which Dufour was very anxious to possess. Vaillant promised to give it him, as soon as it was in his power to do so, and a few days later he kept his word. In the old piratical days coins and medals were often swallowed to save them from the hands of robbers.

LONDON SCHOOL OF CLINICAL MEDICINE.

THE "school dinner" of the London School of Clinical Medicine was held at the Hotel Cecil on Tuesday, March 15th. Sir JAMES CRICHTON-BROWNE was in the chair, and there was a large attendance, including most of the members of the medical and surgical staff and a number of guests. Among those present were: Sir Thomas Barlow, Sir William Bennett, Surgeon-General Babtie, V.C., Admiral Sir John Durnford, D.S.O., Sir Archibald Geikie, President of the Royal Society; Inspector-General Porter, Director-General of the Medical Department of the Royal Navy; Surgeon-General W. S. Gubbins, Director-General of the Army Medical Service; Sir Patrick Manson, Sir Malcolm Morris, Captain A. W. Clarke, Mr. Lawrie H. McGavin, Captain Adolphus Bell, Captain Acton Blake, Commander George Hodgkinson, Captain H. B. Hooper, Sir Frederick Bridge, Sir Robert Burnet, Dr. Andrew Duncan, Dr. StClair Thomson, Dr. Henry Head, Professor Tanner Hewlett, Dr. Kingston Fowler, Dr. Fred. Hewitt, Mr. Cantlie, Mr. C. C. Choyce, Dean of the School, Mr. L. A. Bidwell, Mr. Rock Carling, Mr. Sampson Handley, Dr. G. C. Low, Mr. Perceval A. Nairne, Chairman of the Committee of the Seamen's Hospital, Sir Walter Prideaux, Dr. Frederick Taylor, Dr. James Taylor, Dr. Guthrie Rankin, Mr. C. W. Gordon, Sir Henry Burdett, Mr. R. Lake, Dr. Hawthorne, Dr. Lister, Dr. F. Langmead, Dr. Purves Stewart, and Mr. R. E. Bickerton.

After the usual loyal toasts had been duly honoured, the CHAIRMAN proposed "The London School of Clinical Medicine." He dwelt on the need of continuous education for the medical man who did not wish to be left behind in the advance of science. The system of post-graduate study could, he thought, be traced to the work of Lord Lister, whom surgeons from all parts of Europe and America flocked to see at Glasgow, Edinburgh, and London. Proceeding, the Chairman said that the medical man who would keep abreast of his profession in these days must go to school again from time to time, but until lately there was no school in this country for him to go to. It was the great merit of the London Clinical School that it had provided a seminary in which medical men might find the opportunity of carrying on their education in every department of medicine and surgery. To it, too, medical men of all ages might resort from time to time, to acquaint themselves with all the most recent developments in medical and surgical science. There was no place in the world which offered vaster material for clinical study than Greenwich. To the Thames came not only argosies bearing rich merchandise from all quarters of the globe, but examples of maladies that were unknown in this country. The Dreadnought Hospital was, therefore, a sort of Zoological Garden of disease. In the Dreadnought and its affiliated hospitals—the Royal Waterloo Hospital, Bethlem Hospital, and the General Lying-in Hospital—were to be found specimens of every disease known in this country to which man, woman, or child was liable. He did not suppose there was any hospital in the world with a richer and more varied assortment of all the ills that flesh—white flesh, black flesh, red flesh, and yellow flesh—was heir to than the Seamen's Hospital at Greenwich. In referring to the large field of study offered by the London School of Clinical Medicine, he did not wish in any way to disparage the great medical schools of London and other parts of the country. The school was ancillary to these. He went on to say that he was not there to beg. The school did not ask for money, but its feelings would not be seriously hurt if any kind friend handed it a cheque for £5,000. That sum could be applied in paying off a loan of £2,000 for the starting of the school, and in establishing a fully-equipped pathological department. From the opening of the school in March, 1906, up till the end of last year, more than 200 qualified medical men from all the great universities and medical schools of England, Scotland, and Ireland, from Canada, India, and the United States, had joined its classes, and the number of entries had steadily increased year by year. George Eliot has said that philanthropy increased according to the square of the distance, and the speaker wished that his voice might reach the other side of the Atlantic and induce Mr. Rockefeller to apply a trifling fraction of his £60,000,000 in the building of laboratories and the endowment of research fellowships at the school. There was also need of a hostel in which students might live close at hand. In the meantime Greenwich was by no means inaccessible. It could easily be reached by train. The time might come when a special motor service would be established for the convenience of their students. Perhaps they might even look forward to a time when each man might travel thither in his aëroplane. In that case it was not unlikely that the surgical wards would have to be enlarged. The Chairman concluded by pointing out the special advantages which the school offered for post-graduate study to naval and colonial medical officers. Among the students during the past year there were ten officers seconded from the Naval Medical Service for purposes of post-graduate study. He hoped it would soon come to be recognized that the best preparation for service as a medical officer on a *Dreadnought* afloat was refurbishing his knowledge at the Dreadnought on shore. Sir James concluded by coupling the toast with the name of Sir Dyce Duckworth, in company with whom he had entered on his medical studies fifty years ago. The friendship then began had lasted ever since.

Sir DYCE DUCKWORTH, Senior Physician to the Seamen's Hospital, in responding, paid a tribute to the liberal spirit in which the Seamen's Society endeavoured, as far as means would permit, to meet all the needs of the medical staff. He spoke of the great advantages to the patients and all concerned that were to be found in the association of a medical school with a hospital.

Sir MALCOLM MORRIS proposed the health of "The Guests" in felicitous terms, making special allusion to the connexion between the Royal Society and the science and art of healing. He thought an interesting history of that connexion from the beginning of the reign of Queen Victoria might be written. The toast was replied to by Sir ARCHIBALD GEIKIE, by Inspector-General PORTER, Surgeon-General GUBBINS, and Dr. GEORGE OGILVIE. The President of the Royal Society—who seemed to think that there had been no very intimate connexion between the society and medicine till comparatively recent years—spoke of the commissions appointed by the society to investigate sleeping sickness and Malta fever. In the former case notable results had been attained, but no specific cure had been discovered. That, however, was not the fault of the workers, who had given themselves strenuously to their task. In the case of the second, brilliant success had been achieved, a disease which wrought havoc among the garrison of Malta having been practically stamped out. He mentioned that Sir David Bruce had told him that a fever known by different names in different parts of Africa, but presenting the special characteristics of Malta fever, had been observed in Uganda. The identity was established by the discovery of the *Micrococcus melitensis* in goats.

Inspector-General PORTER said the medical, and also the executive, branches of the Navy fully appreciated the work of the London School of Clinical Medicine. The question of provision for the needs of the service in that direction had been studied by Admiral Sir John Durnford, and it had been arranged that in future fifty naval medical officers should be seconded each year and divided equally between the London School of Clinical Medicine and the West London Hospital.

Surgeon-General GUBBINS gave some interesting illustrations of the ravages wrought by malaria in the army, and said an experiment was now being made at Mauritius to which a large number of the little fish known as "million" which was believed to devour the larvae of mosquitos, had been imported from Barbadoes.

Dr. GEORGE OGILVIE also responded to the toast in a speech full of pawky humour and interspersed with good stories which lost nothing in the telling.

The health of the Chairman was proposed by Captain A. W. CLARKE in a breezy speech which kept the audience, composed as it was for the most part of grave and reverend seniors, in roars of laughter. Sir JAMES CRICHTON-BROWNE responded in his happiest vein. The speeches were agreeably diversified by songs admirably rendered by Dr. McCann, Miss Emily Shepherd and Miss M. Hall King, and an amusing marionette entertainment by Mr. Lauri Wylie.

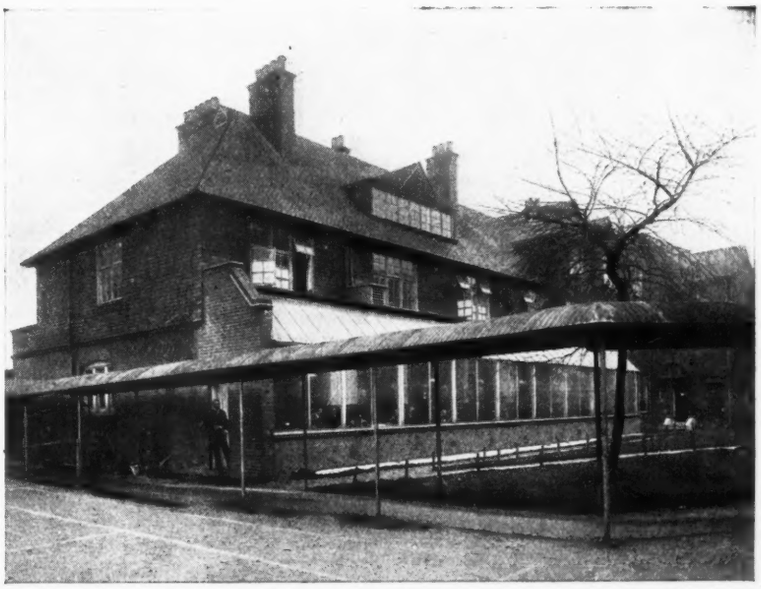
SEVENTY-EIGHTH ANNUAL MEETING
OF THE
British Medical Association
LONDON, JULY, 1910.

POST-GRADUATE SCHOOLS.

WE have already dealt with those general hospitals to which medical schools are attached, and in which important changes have been made during the last fifteen years. Before we pass on to the special hospitals, of which there are so many in the metropolis, we may draw attention to a group of general hospitals which, though they do not possess a medical school in the usually accepted sense of the word, yet provide teaching in the shape of post-graduate classes.

The London School of Clinical Medicine.

The Dreadnought Hospital of the Seamen's Hospital Society at Greenwich is one of the most important of these. The changes in this hospital, which has accommodation for 250 patients, consist chiefly in an enlargement of the wards, and the addition of an out-patient department fully equipped with rooms for consultations and operations. Still more important alterations have been made at the Branch Hospital of the Society at Connaught Road, Albert Dock. Previously to 1895 this hospital contained 12 beds only for accidents, but since that year it has been much enlarged at a cost of over £20,000, so that now it contains 52 beds, and is fitted with all the requirements of a modern hospital. Though this hospital does an extremely useful and necessary work in a poor neighbourhood, it derives much of its importance from the fact that in connexion with it has been established the London School of Tropical Medicine. This school, which owes its origin to Mr. Chamberlain when he was Secretary of State for the Colonies, was instituted in the year 1899. Since that date the school has steadily increased in size, and during the past it has been found necessary to enlarge it still further. There is now laboratory and other accommodation for sixty students. Altogether about £23,000 have been spent on the school buildings.

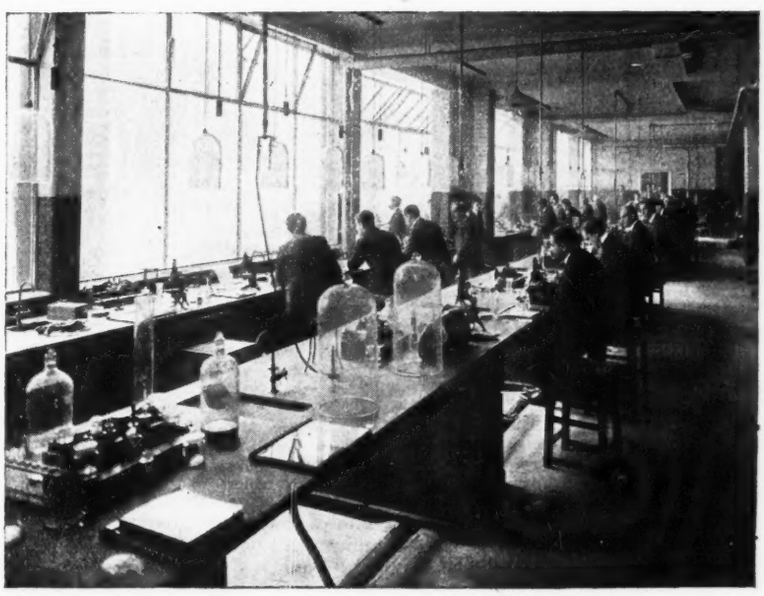


London School of Tropical Medicine: Exterior view, showing extension of General Laboratory, which now affords accommodation for sixty students.

In connexion with the hospital at Greenwich, the London School of Clinical Medicine was formed some four or five years ago, to meet the requirements of which there have been erected two laboratories, a museum, a lecture room, a reading room, and rooms for classes on operative surgery, which is one of the specialities of the school.

West London Post-Graduate College.

Another important centre for post-graduate instruction is the Post-Graduate College attached to the West London Hospital in the Hammersmith Road. Since 1895 the hospital has been enlarged, so that whereas in that year it could accommodate 100, it now affords room for 156 patients. The out-patient department has been remodelled, and casualty and x-ray departments added.



London School of Tropical Medicine: Interior of General Laboratory; seating accommodation for sixty students.

In 1895 the only teaching given in connexion with the hospital consisted of courses of lectures. In 1897, however, systematic teaching was commenced in the wards and out patient rooms. In 1901 a special building was erected for the college, which has been added to on several occasions to meet the increasing popularity of the teaching. The hospital practice is reserved exclusively for qualified men, and the teaching is especially adapted to their needs. Small special classes are held at short intervals in a variety of subjects, and all the instruction is absolutely practical in character; classes for operations on the cadaver are held frequently.

North-East London Post-Graduate College.

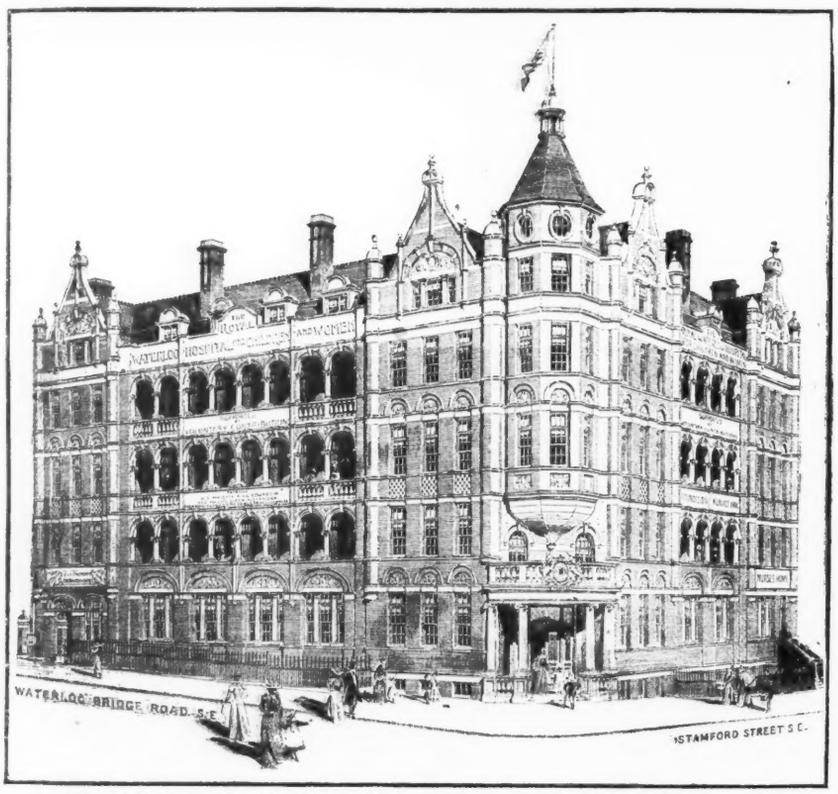
The Prince of Wales's General Hospital, to which is attached the North-East London Post-Graduate College, is pleasantly situated on the High Road, South Tottenham, N., and is readily accessible by train or electric tram from all parts of London. It is most easily reached from the West End by the Piccadilly and Brompton tube to Finsbury Park, and thence by the Edmonton electric tram. Having its origin, nearly fifty years ago, in a ragged school and home for orphan girls, the hospital filled a useful place in the life of the district till 1893. Soon after that year, however, for reasons into which it is unnecessary here to enter, its fortunes began rapidly to decline. The dissatisfaction of the public with the management of the hospital led to an inquiry in 1895, as a result of which a scheme of reorganization was put into effect, and in 1899 the hospital began a new career. Since that date it has been from time to time enlarged by the addition of special departments, and it was soon found that to meet the requirements of these the buildings would have to be extended. In 1905 the Drapers' Company gave a sum of £7,050 towards the erection of an operating theatre and two new wards; and it was also decided to enlarge the old wards and erect a new administration block at a cost of £20,000. The new buildings were opened in May, 1907, by the Prince of Wales, who graciously consented to the hospital receiving its present name. The hospital now contains 125 beds, and is provided with a well-equipped out-patient department. There can be little doubt that the progress of the hospital during the past ten years has been aided by the opening of its doors to the post-graduate student. The first step in this direction was the formation in 1900 of the North-East London Clinical Society, which holds its meetings in the hospital. A more important and ambitious step was the foundation in 1902 of the North-East London Post-Graduate College for the purpose of affording opportunities of study for qualified men who wish to obtain the higher professional degrees and diplomas, or who are desirous of keeping themselves up to date in technical knowledge. Besides the clinical and pathological lectures, demonstrations, and classes at the Prince of Wales's Hospital, the student is able to attend courses on fevers, lunacy, etc., at certain special institutions with which arrangements have been made.

The Prince of Wales's General Hospital.

Each of the hospitals with post-graduate schools attached is recognized by the universities and other examining bodies, and by the authorities of the navy, army, and the India and Colonial Offices, as schools of advanced studies.

The Polyclinic.

In writing on the subject of post-graduate instruction, acknowledgement for pioneer work in this direction in London must be accorded to the *Medical Graduates' College and Polyclinic*, even though it is not, strictly speaking, attached to a hospital. It was founded in 1899, to meet the requirements of the practitioner who can either devote only a few hours weekly to studying the latest methods or come up to London for a few weeks at a time with the object of improving his practical clinical knowledge. The college is very conveniently situated at 22, Chenies Street, Gower Street, close to Euston, and to several Underground and Tube stations. The building comprises an excellent set of rooms for clinical demonstrations and lectures, reading rooms, a smoking room, library, laboratory, and museum. The museum contains the unrivalled collection of drawings and plates, illustrative of disease in all its manifestations, collected and prepared by Sir Jonathan Hutchinson, who, we are glad to be informed, still continues to give a clinical demonstration every Thursday afternoon. Arrangements are being made to provide a fully-equipped *x*-ray department. Clinical lectures and demonstrations, in every branch of medicine and surgery, are given every afternoon, to which the members may bring their own patients, if poor, for consultation and advice. Besides these lectures there are practical courses extending over several weeks. On the staff of the college are members of the staffs of all the most important metropolitan and some of the provincial hospitals. The Polyclinic is not attached to any particular hospital, but is affiliated to the London Post-Graduate Association, so that by arrangement its members can attend the clinical practice of most of the large London general hospitals. The laboratory at the Polyclinic is fitted up not only for the purposes of teaching, diagnosis, and treatment, but for original research. There can be no doubt that the institution of the Polyclinic met a demand which nowadays we wonder was not fulfilled earlier.



The Royal Waterloo Hospital for Children and Women, Waterloo Bridge Road, S.E.

Hospitals for Children.

From the general hospitals we turn naturally to the more generalized of the special hospitals—namely, the hospitals for children.

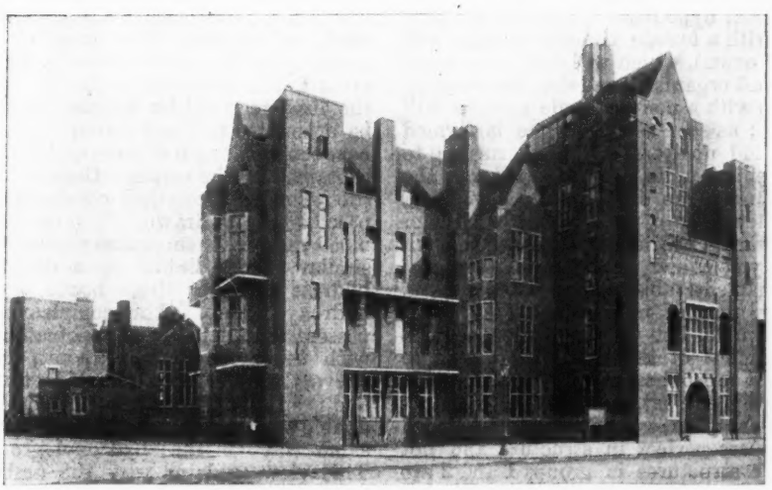
The *Hospital for Sick Children* is situated in Great Ormond Street, not far from the Museum Station of the

Central London Railway. Here there are 220 beds, while there are 40 at Cromwell House, Highgate, which is used as a convalescent home. This house once belonged to John Ireton, brother of Cromwell's son-in-law, Henry Ireton. On the staircase are some figures finely carved in wood, representing soldiers of the Parliamentary army, the models for which were possibly members of Cromwell's "lovely company." A brief account of these figures, with illustrations, will be found in the third volume of Newnes's illustrated edition of Green's *Short History of the English People*. Dr. Mead's house stood where the hospital in Great Ormond Street is now. During the last eleven years very considerable additions have been made to the hospital in Great Ormond Street. In 1898 the neighbouring Hospital of St. John and St. Elizabeth and a convent were bought; the hospital was pulled down and the convent converted into a nurses' home. In 1900 the whooping ward was opened, and in 1906 a new set of isolation wards were added on the top of the hospital. But the most important of the additions is the out-patient and casualty department. To make way for this the Working Men's College was acquired and demolished. Patients entering the department from Great Ormond Street are received in a hall, where they are sorted. Thence they pass to a larger hall behind, where they wait till they are seen by the physicians and surgeons in attendance. Adjoining these halls are the rooms for examination and, if necessary, isolation, and two operating rooms. From the large hall the patients pass to a smaller one, situated under the first, where they receive medicine from the dispensary, and then leave by an exit to Great Ormond Street. "The three halls are on three different levels, but, by an ingenious disposition of sloping passages, there is not a flight of steps in the building down which a mother or child might trip and fall." The whole of this department, which was opened in 1908, was the gift of Mr. W. W. Astor, who erected it as a memorial to his daughter. On one side of the large waiting hall is a beautiful drinking fountain of marble, with figures of St. Luke and St. Nicolas of Bari (Santa Claus), also the gift of Mr. Astor. The cost of the building and the site was £50,000.

Victoria Hospital for Children, Chelsea.

The *Royal Waterloo Hospital for Children and Women*, situated close to the south end of Waterloo Bridge near the station of that name, was entirely rebuilt on an enlarged site in 1903–4. It forms a handsome edifice at the corner of Stamford Street, and accommodates 90 patients. The lower ground floor is occupied by the out-patient department; on the ground floor are placed the administrative offices and quarters for the resident medical staff. The first, second, and third floors are devoted to the wards; each of the large wards is provided with an open balcony, with outside arches, facing the Waterloo Bridge Road. The bath-rooms and sanitary offices are separated from the wards by well-ventilated corridors. The operating theatre is on the third floor. The fourth floor contains the main kitchen, as well as the dining-rooms, sitting-rooms, and bedrooms for some of the staff. A large hydraulic lift for patients, and two small service lifts travel from top to bottom of the building. The building, so far as it has been completed, cost £45,000, including fittings and furniture. It is intended, when funds become available, to complete the design, only two-thirds of which has been carried out; but for this it is estimated that another £30,000 would be required.

The *Victoria Hospital for Children*, Chelsea, S.W., has been entirely reconstructed and enlarged since 1896; the block which formerly contained the wards has been turned into an administrative block, with quarters for the medical officers, matron, and some of the nurses and servants. A new wing has been added which contains six large wards with 16 beds each; an isolation department of three small wards, containing 8 beds; a very efficient operating theatre; and an *x*-ray department and clinical laboratory. A new mortuary and *post-mortem* room have also been added, and what was formerly a small isolation cottage has been converted into an out-patient theatre and recovery rooms, which have added considerably to the convenience of the out-patient department. The hospital contains 104 beds.


Belgrave Hospital for Children, Clapham Road.

The *Belgrave Hospital for Children* was formerly situated near Warwick Square, Pimlico, but a few years ago it was rebuilt in Clapham Road, near the Oval station of the South London Railway. The new hospital, which accommodates 40 in-patients, and is a conspicuous red-brick building, was opened for patients in 1903 by H.R.H. Princess Henry of Battenberg. The main entrance in the Clapham Road opens on to a corridor, with offices on either side, which leads to the central hall. The corridor and hall are paved with marble and furnished with a marble dado some 6 ft. high. Rooms for the house-surgeon and matron adjoin the hall. The kitchen forms a wing on the east; and on the north is a block containing the out-patient department and isolation ward, which are quite cut off from the main building. There are four floors above the ground floor; the first contains two medical and the second two surgical wards. Above are the operating theatre and the nurses' quarters, all

excellent. The staircase and floors are of polished teak, while the walls are mostly tiled. The general appearance is very cheerful. It is proposed at some future date to add a south wing on a vacant plot of ground belonging to the hospital. The present buildings cost about £37,000.

Another children's hospital which has been entirely rebuilt of recent years is the *Queen's Hospital for Children* (formerly the North-Eastern Hospital for Children) in the Hackney Road. It contains 130 beds, and serves an exceedingly populous but poor district.

The most important additions to the *Evelina Hospital*, another well-known children's hospital, are an entirely new out-patient department, complete in every detail, erected at a cost of £14,000, and an additional story for the accommodation of the nursing staff.

SCIENCE NOTES.

THE Royal Society of Edinburgh[1] has recently published Dr. Berry Hart's article on the reproductive organs of that mysterious quadruped, the free-martin. The conclusion to which the author comes is that "the free-martin is, according to Mendelian phraseology, a pure or extracted recessive *qui* its genital determinants, and the potent twin a pure or extracted dominant, both of F^2 in the Mendelian scheme." To the reader unskilled in recent embryological theorizing this statement may sound a little less comprehensible than Lewis Carroll's explanatory remark that "the Snark was a Boojum, you see." But a well-defined and ingeniously contrived theory underlies this mysterious definition of the apparent sterile cow born co-twin with a potent bull which is commonly called a "free-martin." In order to get an inkling of Dr. Berry Hart's meaning we must refer back to his own paper on Mendelian action on differentiated sex, published *in extenso* in the *Transactions of the Edinburgh Obstetrical Society*.[2] Beginning with the fact that the human female and male have each not only characteristic sex organs fully developed, but also traces of those of the opposite sex, Dr. Berry Hart reaches the conclusion that the ova and spermatozoa are gametes, and are each of two types; there are two male gametes of unequal value and two female gametes also of unequal value; one male gamete contains the male sex-unit character and one female gamete has the female sex-unit character; and so we may speak of a male sex gamete and a male non-sex gamete, and of a female sex gamete and a female non-sex gamete. A further hypothesis is that the crossing of a male sex gamete with a female non-sex gamete will give a zygote (fertilized ovum), which will develop a male holophyte (fully developed organism), and that the crossing of a female sex gamete with a non-sex male gamete will give a female holophyte; as soon as the zygote is formed the sex is determined and unalterable. Then, turning to the male and female genital units, Dr. Hart regards the female genital unit as made up of (1) a fully developed, evident segment, characteristic of the female sex, comprising the mammae, ovaries, ovarian ligaments, Fallopian tubes, uterus, vagina, hymen, and urino-genital sinus; of (2) a part (the round ligament, labia majora, labia minora, and the glans) potent, normal in structure, less fully developed than in the male, but always analogous to a definite continuous segment of the corresponding male organs; and of (3) a part (epoöphoron and upper portion of Wolffian duct) normally present, made up of developmental portions equivalent to corresponding fully developed organs in the male, but less perfect in structure and not equally functional. The structures in groups 1 and 2 are looked upon as female potent (dominant) elements, and the two placed in group 3 as female non-potent (recessive) elements. In the male genital unit, in its turn, there are male potent (dominant) elements, namely, the testes, phallus, prostate, prostatic urethra, scrotum, Wolffian ducts, Wolffian bodies, gubernaculum, and caudal ligament of the testis, and male non-potent (recessive) elements, namely, the mammae, prostatic utricle, fimbriated ends of Fallopian tubes, and paradidymis. By combining in one theory these two hypotheses, the varietes of gametes and the distinction of the genital organs into potent and non-potent, the explanation of the presence in one sex of rudimentary organs of the other, of the strange structures known as teratomata or embryomata, and of the free-martin is reached. It is not practicable in a short note such as this to follow Dr. Hart in his argument, which is very attractive, although there are doubtless weak parts in it; but it may be said that he believes that the teratoma arises from a non-sex variety of gamete, that the testicular teratoma is derived from an imperfectly reduced non-sex male gamete, and the ovarian one from an imperfectly reduced ovum. Further, with regard to free-martins, the conclusion is that such an animal is not a hermaphrodite, but may be one of two things—the free-martin, born co-twin with a potent bull, which is a sterile male, or the free-martin, born co-twin with a potent cow, which is a sterile female; the second is by far the rarer of the two. The former, according to the Mendelian scheme, would originate in this way: a male sex gamete unites with a female non-sex gamete and gives a male zygote (F^1); this, *if it twins*, may give a bull with equivalent soma and potent genital organs (the dominant) and a bull with equivalent soma and non-potent genital organs, female type (the recessive); these twins constitute F^2 in Mendelian phraseology, and are the potent bull and the free-martin respectively, the former being a pure or extracted dominant, and the latter a pure or extracted recessive. Manifestly the subject is both intricate and difficult, and it requires both close study and a working knowledge of Mendel's law in all its ramifications; but it is a serious attempt to grapple with some of the most mysterious phenomena of generation and its anomalies, and it holds out the hope of ultimate success in reducing disorder to order, and in explaining matters hitherto regarded as inexplicable.

Haemolysis is a subject which has been much studied of late, but its phenomena are as yet imperfectly understood. It is induced by a large number of different substances and under very variable circumstances. An explanation of the action on a chemical basis has recently been offered by von Krogh.[3] Solutions of sodium hydrate produce haemolysis, and the length of time required increases as the strength of the solution is diminished, but not in simple proportion. The action apparently consists in the combination of the hydroxyl group with some component part of the blood corpuscle, resulting in the formation of a substance which causes the haemoglobin to go into solution. In haemolysis by haemolytic serum it is immaterial whether the amboceptor and complement are added separately or together. The union of the corpuscle and the amboceptor takes place almost immediately, but the complement is taken up comparatively slowly. The variation in the time required for haemolysis to be complete can thus be accounted for, and a simple relation can be formulated between the length of time and the amount of complement contained in the serum. Considering these facts in detail, the following theoretical conclusions as to the haemolytic process may be drawn. It must be supposed that in the blood there is a substance whose molecule consists of two similar groups linked by a double bond. The sodium hydrate liberates these bonds, and each unites with a hydroxyl group. The complement, however, does not possess a sufficient degree of affinity to enter into union with the blood corpuscle; but, as has been remarked above, the amboceptor is rapidly taken up by the corpuscle and prepares the way for the complement by liberating the double bonds. The complement unites with those in the same way as the hydroxyl group in sodium hydrate. This view explains why the amboceptor and the blood corpuscles are not united in any stoichiometric relation. The function of the amboceptor in Ehrlich's side-chain theory may thus also be accounted for. The receptor is formed from the molecule containing the double bond, but must first be prepared by the amboceptor before it is ready to fulfil its function. Krogh concludes that there is much to be hoped from a chemical treatment of such subjects, and that the uncertain results hitherto obtained are due, in part at least, to the fact that more attention has been paid to completed action than to the rate at which such actions take place.

[1] *Proc. Roy. Soc. Edin.*, xxx, Part iii, pp. 230-241, 1909-10.

[2] *Trans. Edin. Obst. Soc.*, xxxiv, 303-357, 1908-9.

[3] Ein Versuch zu Stöchiometrie der Hämolyse. *Biochemische Zeitschrift*, xxii (1909), pp. 132-148.

A simple practical method of imitating the normal and abnormal heart sounds for teaching purposes is described by Dr. Larned in the *Bulletin of the Johns Hopkins Hospital* for February. The student is made to place his hand over one ear and on the dorsum the teacher percusses with his finger. The various abnormal sounds and rhythms can be reproduced surprisingly well, as may be demonstrated to one's own satisfaction. The closed sounds are made by sharp taps, hard or soft, as the case may be, while a murmur is produced by drawing the finger along the dorsum of the hand. A presystolic murmur is imitated by tapping with each of the fingers in rapid succession, starting with the little finger and finishing with the index. By causing the latter to stroke the hand an accompanying systolic murmur may be reproduced. In this way all the various combinations of sounds and murmurs may be imitated more or less faithfully, depending on the skill of the teacher. Loud sounds may be obtained by tapping on the metacarpals, distant sounds by tapping the intervening muscles. A more accurate imitation is got with a plump hand than with a bony one. It has always been a difficult matter to give junior students a realistic idea of heart sounds apart from actual stethoscopic practice, and this practice is apt to be rather laborious and unsatisfactory unless the student first gets a clear conception of what he is expected to hear. The caligraphic or vocal representations, as commonly employed, are usually very inadequate, and there is no doubt that Dr. Larned's method would prove an efficient substitute.

THE UNIVERSITY OF LONDON: A DEGREE FOR LONDON MEDICAL STUDENTS.

AT the meeting of the Council of the Royal College of Surgeons of England on March 10th, and at the meeting of the Royal College of Physicians on March 14th, a further report, dated February 15th, was presented by the delegates appointed by the Royal Colleges in June and July, 1908, to consider a scheme for establishing joint action with the University of London for the holding of examinations and the granting of diplomas and degrees in accordance with Statute 123 of the University.

ACTION OF THE ROYAL COLLEGES.

The delegates had been instructed to draft a scheme for submission to the Senate of the University of London, and their report, dated December 3rd, 1908, was accordingly communicated to the University at the end of January, 1909, and was published in the BRITISH MEDICAL JOURNAL of March 6th, 1909, p. 607. In the interval, however, the Senate of the University had asked for a Royal Commission, and this request had been granted. The delegates consequently recommended that the Royal Colleges should take steps to secure the representation of their views before the Royal Commission, and that they should also ask the University to appoint delegates to discuss the question with the delegates of the Royal Colleges, so that, if possible, a joint representation to the Royal Commission might be agreed upon. It is in pursuance of this recommendation that the further report has been presented to the two Colleges on the evidence which should be given conjointly by the two Colleges before the Royal Commission. The report, as will be seen, embodies a scheme for joint action by the Colleges and the University, but it appears that the University has not directly replied to the request for a conference between the delegates of the Royal Colleges and the delegates of the University.

Report.

1. The disability under which the London Medical Student labours by not being able to obtain a degree of M.D. on such terms as exist in other universities in the United Kingdom.

The evidence should include an explanation of the reasons why a degree is sought as well as diplomas, among such reasons being (1) the value attached to the title in the estimation of the public; (2) the disadvantage to those who have no degree in competitions for hospital appointments and various local appointments and in general practice; (3) the misunderstanding which arises owing to the double use of the word "doctor."

In support of the evidence of the disability attaching to London students, the following tables have been prepared from the list of registered medical students issued by the General Medical Council, showing:

(1) The average total number of students registered in *England* during the 15 years (1894–1908);
(2) The number of students in *England* who registered on the Matriculation Examination of the University of London;
(3) The number of registered students in *London Schools*;
(4) The number of students in *London* who registered on the Matriculation Examination of the University of London;
(5) The percentage of registered *London* students who are eligible to take the degree of the University of London, as compared with those eligible solely for the diplomas of the Royal Colleges.

TABLE A.
Registered Medical Students in England.
(Men and Women.)

Period.	Average Annual Number of Registered Students in England.	Average Annual Number of Students in England Registered on Matriculation of University of London.	Percentage.
1894–1898... ...	890	252	28.3
1899–1903... ...	683	192	28.1
1904–1908... ...	599	145	24.2

TABLE B.
Registered Medical Students in London.
(Men and Women.)

Period.	Average Annual Number of Registered Students in London.	Average Annual Number of Students in London Registered on Matriculation of University of London.	Per-centage.	Students Eligible for Conjoint Board Only.
1894–1898 ...	450	186	41.3	58.7 per cent.
1899–1903 ...	332	140	42.1	57.9 per cent.
1904–1908 ...	282	108	38.3	61.7 per cent.

These tables show that the University of London has made comparatively little impression on the course of study for graduation in medicine in England, and has hitherto influenced less than half the students who take out their curriculum in London.

It is fair to state, at the same time, that the University has recently considerably increased the facilities for matriculation by the recognition of examinations conducted by other bodies, and by holding its own matriculation examination three times a year. The effect of this new departure has not yet been fully felt, but it may not improbably lead to an increase in the proportion of London students who are eligible to take the University degree.

2. The desirability of an association between the Royal Colleges and the University in a scheme for granting degrees of M.B., B.S., and M.D. with the diplomas of L.R.C.P. and M.R.C.S. for students who have completed at least four of the five years of professional study at a London medical school, and in so far as such degrees are concerned, the establishment of a co ordinated Medical Faculty in London.

(*a*) Evidence should be given on the advantage (i) of a uniform system of education for all students in London, so that one set of general instructions may be issued directing the steps of the student from the outset of his career in a course leading directly to the attainment of the degree and diplomas; (ii) of the course of education of the London University student being brought into relation with the examinations.

(*b*) The importance should be urged of bringing the experience and influence of the Royal Colleges, as the recognized authorities on clinical medicine and surgery, to bear, in conjunction with the University, upon the control of medical education in London—for example, by a joint board, formed for this purpose, consisting of representatives of the Medical Faculty and of the Royal Colleges.

(*c*) The statistics in the following tables should be given in evidence (i) of the proportion of the total number of students in England who present themselves for the Final Examination of the Royal Colleges; and (ii) of the number of graduates in medicine of Universities who take also the diplomas of the Royal Colleges.

TABLE C.

Return Showing the Proportion of Students Entering for the Final Examination of the Royal Colleges, as Compared with the Entry of Students Five Years Previously.

Students Registered in England in (Omitting Women):		Students Entered for Final Examination in:		
1891	1265	1896	623 or 49.2 %	
1891	874	1897	559 or 63.9 %	Average 57.3 %
1893	947	1898	558 or 58.9 %	
1894	938	1899	586 or 62.4 %	
1895	881	1900	484 or 54.9 %	
1896	840	1901	519 or 61.7 %	
1897	771	1902	573 or 74.3 %	Average 62 %
1898	852	1903	489 or 57.3 %	
1899	863	1904	470 or 54.4 %	
1900	702	1905	449 or 63.9 %	
1901	559	1906	395 or 70.6 %	
1902	556	1907	384 or 69.0 %	Average 69.9 %
1903	549	1908	414 or 75.4 %	
1904	605	1909	398 or 64.6 %	

Women are omitted from the number of registered students in the Return for the reason that the Royal Colleges have not hitherto admitted women to their examinations.

TABLE D.

1. During the years 1903 to 1906, both inclusive, 529 male candidates obtained the degree of M.B. or M.D. of the University of London.

Of these, 446 or 84.3 per cent. are also diplomates of the Royal Colleges.

2. During the same period 253 candidates obtained the degree of M.B. of the University of Cambridge.

Of these, 181 or 71.5 per cent. are also diplomates of the Royal Colleges.

3. During the period 1,704 candidates obtained the diplomas of L.R.C.P. and M.R.C.S.

Of these, 885 or 52 per cent. are also graduates of, or candidates for, the degrees in Medicine of the following universities:

London	347 = 20.4	per cent.
Cambridge	274 = 16.1	,,
Other universities in England...	119 = 7	,,
Indian and Colonial universities	103 = 6	,,
Foreign universities	25 = 1.5	,,
Scottish and Irish universities..	17 = 1	,,
	885 = 52	,,

3. The advantages to be gained by adopting a scheme for joint examinations such as the following, which has been drawn up by the delegates as a basis of negotiation.

SCHEME.

MATRICULATION.

Pass Degree and L.R.C.P. and M.R.C.S. for students who shall complete not less than four years of professional study at London medical schools and hospitals.	Honours' Degree (with or without L.R.C.P. and M.R.C.S.) for students from any medical school and hospital, that is, the degree as granted at the present time.
The Matriculation Examination of London or equivalent accepted by the University together with such other examinations as may be agreed upon. Candidates who pass a Preliminary Examination recognized only by the Royal Colleges shall be eligible for L.R.C.P. and M.R.C.S. alone, but arrangements shall be made for such candidates at a later stage of their curriculum to be allowed, by passing in certain special subjects of general education, to be transferred from Conjoint to Pass Degree Candidates.	Matriculation Examination, or equivalent accepted by the University.

PRELIMINARY SCIENTIFIC EXAMINATION.

First Conjoint Examination in Chemistry, Physics, and Biology, conducted by Conjoint Examiners with University Assessors. Candidates must be educated at medical schools or institutions either in London or elsewhere, recognized by the University or the Royal Colleges.	First Examination for Medical Degrees (Inorganic Chemistry, Physics, and Biology). To be conducted by University Examiners only. No conditions as to place of study.

INTERMEDIATE M.B., B.S. EXAMINATION.

Second Conjoint Examination in Anatomy, Physiology, and Practical Pharmacy, conducted by Conjoint Examiners and University Assessors.	Second Examination for Medical Degrees, Part I (Organic and Applied Chemistry), Part II (Anatomy, Physiology, and Pharmacology), conducted by University Examiners only.

FINAL M.B., B.S. EXAMINATION.

First Conjoint Examination in Medicine, Pathology, Forensic Medicine, Hygiene, Surgery, Midwifery, and Diseases of Women, conducted by Conjoint Examiners with University Assessors.	Third M.B., B.S. Examination in Medicine, Pathology, Forensic Medicine, Hygiene, Surgery, Midwifery, and Diseases of Women, conducted by University Examiners only.

NOTE.—Candidates for the Honours Degree who desire to take also the Diploma of L.R.C.P. and M.R.C.S. may pass the Final Examination for the Pass Degree and Diplomas, and shall undergo such further Examination for the Honours Degree as the University may determine.

M.D.

Examination conducted by, or thesis approved by, a Board of Examiners appointed jointly by the University and the Royal Colleges.	Additional examination conducted by University Examiners or original research, (Same as at present.)

Such conditions of admission to the degree and diploma, after examination as the statutes of each body may require, shall remain.

If thought desirable by the University, the scheme shall permit of the same papers and the same examination machinery being utilized for the Pass and Honours degrees, with such a higher standard of marks and additional conditions as the University may determine for the Honours degree.

4. The desirability of establishing a wider system of clinical teaching in London so as to utilize to the utmost the unrivalled clinical opportunities of the metropolis.

The advantage of an organized system by which the students of one hospital and medical school may be able to attend the instruction given at others, under certain restrictions, should be pointed out.

5. The desirability of the endowment of medical teaching in London.

6. The desirability of organizing medical research in London.

7. It should be made clear to the Royal Commission that the Royal Colleges cannot accept any position which interferes with their complete autonomy in regard to their own affairs and to the examinations for students other than those who are candidates under the proposed scheme of association with the University.

The report was adopted by the Council of the Royal College of Surgeons, but by the Royal College of Physicians was referred to a large committee of the College with a wide reference to report on the whole subject to a future meeting.

ACTION OF THE MEDICAL FACULTY.

It will be convenient to add here a brief account of the action taken by the Medical Faculty with regard to the proposed changes in the constitution of the University.

In 1905 the Faculty appointed a committee to consider and report as to the best means by which teaching and research in the advanced subjects of the medical curriculum could be promoted in the schools of the University by the action of the University. This committee, of which Dr. Fowler was chairman and Dr. Lauriston Shaw secretary, consisted of thirty-four members; it consulted the medical schools and presented a report dealing with the matter under the following heads:

Development.

The report pointed out that it was generally acknowledged that the active prosecution of research ought to exist side by side with teaching, and expressed the opinion that it would strengthen the University and its medical schools to increase the provision for research in pathology, pharmacology, and clinical subjects. The University already allowed the M.D. degree to be taken by the way of original research, and a certain number of prizes and scholarships were in existence, but did not succeed in producing the desired effect. It was considered that a better plan would be to render the teaching of and research in pathology attractive to the best man, who now worked under great difficulties. If they could find in pathology a good position and sufficient livelihood, they might be trusted both to do good work and to encourage work in others. The committee therefore considered it desirable that the University should create and endow, or help to endow, professorships and lectureships in pathology at the various schools, and should connect itself with any institution apart from the medical schools which now exists, or may exist in the future, for the prosecution of general pathology in London. The last recommendation has to some extent been met by the recognition of the London School of Tropical Medicine, of the Lister Institute of Preventive Medicine, and of the Royal Army

Medical College. The opinion was also expressed that it would be a great advantage, both for teaching and research in the pathology of mental diseases, if the laboratory of the London County Council, now at Claybury Asylum, could be moved to a more central situation in London, since (*a*) it would be to the advantage of each medical school to have within reach a laboratory at which those students who wished to study the pathology of mental diseases would have great facilities at their disposal, and (*b*) it would facilitate research if the available material which the County Council laboratory offers were rendered more accessible to pathologists.

Grouping.

The report stated that the payment of lecturers on advanced subjects at the medical schools of London is very inadequate, and that classes could be increased in size without becoming too large; if two or more of the classes now held separately could be joined, not only would a great saving of labour be effected, but payment of the lecturer would be raised to a higher level. It was, however, considered that there were many objections to the adoption of combined or intercollegiate lectures for the main subjects of the curriculum, but that the plan was feasible for subjects not within the ordinary practice of the acting staff of a general hospital, such as mental diseases, hygiene, and forensic medicine. The committee suggested that in each of the above subjects a few lecturers would be able easily to teach all the medical students in London, and that the stipends, now very inadequate, would be proportionately increased. It was also suggested that such lecturers should be professors or lecturers of the University, appointed by it, and that the chairs should eventually be wholly or partly endowed.

Finance.

The committee believed that the University might do great service to medical education by drawing attention to the striking contrast between the public support given to the advanced subjects of medical education and research in London, and in other university towns in the United Kingdom. Any funds which the University might be able to devote to these subjects might best, it was considered, be expended by increasing the income arising from any endowment or other contributions which the schools might in the future individually secure. The inclusion of the medical schools of London as schools of the University presupposed that they were public educational establishments as defined in the University of London Act in 1898, that is to say, "institutions for a special kind of education or teaching and not carried on for the private gain or profit of the body or persons to whom the institution belongs."

The committee believed that the more clearly this position of the schools could be made manifest, the less difficulty would be met in obtaining public financial support. In accordance with this view the executive bodies of the medical schools should consist of representatives of the teachers of the school and of the governors of the hospital, with a representative of the University, and possibly representatives of other public educational bodies. The particular branches of education and research which most needed pecuniary assistance were, it was considered, pathology and pharmacology; the fact that the work would be carried on in connexion with the clinical schools of the University would ensure that special attention was given to those aspects of these subjects which had a practical bearing on the art of medicine and surgery. Finally, the committee recommended that the University should make it clear that it would be most disposed to offer and influence pecuniary support for projects in connexion with the advanced subjects of the curriculum in which the interests of education and of research were evenly balanced.

Inspection.

The committee recommended that the medical schools of the University should, in accordance with Statute 76, be inspected at regular intervals by the University, reports upon efficiency being made to the Senate; the inspection should extend to all practical work done by undergraduates in each school, with the object of allowing the report of the inspector to carry some weight in the examinations for which the students were preparing. If the marks given for the students' work did not bear too high a proportion to the total obtainable for the examination undue influence on the part of the teachers could not have great weight, while the effect upon the student of feeling that his everyday practical work would have a definite influence upon success in examination could not fail to raise the standard of his work to a higher level.

The Constitution of the University.

The Faculty of Medicine at its meeting on November 1st, 1909, considered the question of the proposed changes in the constitution of the University, and adopted the following recommendations:

1. That the medical degrees of the University of London should be open only to those students who are students in the schools of the University.
2. That all medical questions affecting the University should be submitted to some such body as the Faculty Board recommended by resolution of the Faculty of Medicine on March 26th, 1909.
3. That all Boards of Studies in medical subjects shall be committees of the Faculty, and appointed by the Faculty after receiving a report from the Faculty Board.
4. That the Faculty Board shall report to a body of the character of the present Academic Council, who shall have executive power in all academic matters not involving finance.

Needs of the University.

A meeting of the Faculty was summoned for November 30th, 1909, but there was no quorum present. In view, however, of the urgency of the matters awaiting consideration, the twenty-four members present requested Dr. F. H. Champneys to take the chair, and drew up the following report:

Without expressing any definite opinion on the details of the reports of the Boards of Studies, the members of the Faculty present consider that, in order to secure co-ordination among the medical schools, and improve the efficiency of medical education in London, it is important that the control by the University over the medical schools be increased.

This can be effected by securing to the University the disposal of funds which it can apply for the maintenance of education and research in the London medical schools.

The members of the Faculty present also draw attention to the fact that, unlike many medical schools attached to universities, the medical schools of the London hospitals receive no grant-in-aid from the Treasury, and are almost entirely dependent on students' fees.

The members of the Faculty present recommend that the report of the Special Committee appointed by the Faculty in 1905, which report was adopted by the Faculty, should be reaffirmed.

Nova et Vetera.

PELLAGRA.

ATTENTION has already been drawn more than once in the JOURNAL to the proposed organization of research on the causation of pellagra. It has been pointed out that it occurs in greater or less amount in several of our colonies and dependencies, and that within the past few years it has invaded some of the southern parts of the United States, notably South Carolina, and has spread so extensively as to cause alarm. In the JOURNAL of February 5th, 1910, p. 327, we gave a list of the members of the committee which has been formed to carry out a scheme of research as to the causation of the disease, taking Dr. Sambon's protozoal theory as a working hypothesis. An advisory subcommittee has since been formed which will take an active part in the direction of the investigation. The chairman is Sir Lauder Brunton; the vice-chairman, Dr. F. M. Sandwith; the honorary secretary and treasurer, Mr. James Cantlie (140, Harley Street, W.). In addition to these *ex-officio* members, the advisory subcommittee includes the following: Mr. E. E. Austen; Mr. E. C. C. Bayly, F.R.S., Assistant Professor of Chemistry, University College; Lieutenant-Colonel Sir William Leishman, F.R.S.; Dr. J. M. H. MacLeod, of the London School of Tropical Medicine; Sir Patrick Manson, F.R.S.; Sir John McFadyean, Principal of the Royal Veterinary College; Dr. Mott, F.R.S.; and Professor R. Ross, F.R.S.

The research will be carried out by Dr. Sambon, with whom Dr. J. E. Siler, Captain, Medical Corps, United States Army, will co-operate, with Messrs. Arthur Dawson-Amoruso and G. C. C. Baldini as assistants. Captain Siler is lecturer in the American School of Tropical Medicine, and has already been investigating pellagra in America. In conjunction with Captain H. J.

Mitchells he contributed to the New York *Medical Record* of January 15th, 1910, a paper entitled, "Observations on Pellagra at the Peoria State Hospital, Peoria, Ill." Mr. Baldini is a student at St. Bartholomew's Hospital; his family lives in the North of Italy, and his services will be very useful on account of his knowledge of the places and dialects. Mr. Dawson-Amoruso is a young field naturalist, who has lived for several years in the North of Italy and knows the dialects. The Bergamo Standing Commission for the Investigation of Pellagra have, through Mr. Baldini, offered to help the workers in every possible way.

Little is known of pellagra in this country except by a few specialists who have had the opportunity of studying the disease. In a paper which appears in the January number of the *American Journal of the Medical Sciences*, Dr. Nevins Hyde gives a brief history, from which we take the following facts: The disease has been variously termed Mal de la Rosa, Risipola Lombarda, Lombardy Erysipelas, Lepra Italica, Alpine Scurvy, Mal Rosso, Mal Roxo, Maïdica, Psychoneurosis Maïdica, Maladie de la Teste, Malattia della Miseria, Mal de Sole, Mal de Asturias, Raphania Maïstica, Malattia dell' Insolato di Primavera; and other titles have been employed in its designation. Though vaguely recognized before his time, the first authentic description of the disease was made by a Spanish physician, Gaspar Casal, under the title Mal de la Rosa, the fruit of observation made by him among the peasants of the Asturias in the year 1735. His work was written in Latin, and published after his death by Joseph Garcia in the year 1762. His description of the pellagrous skin shows close observation:

> Degenerat tandem in crustam siccissimam, scabrosam, nigricantem, profundis saepissime intercissam fissuris, etc.

Frapolli of Milan, in 1771, is generally said to have first given the name to the disease by which it is now most generally known; but, in fact, he merely reproduced a title current among the people of his day: "Morbus, vulgo Pellagra." In the long list of authors who followed, from Strambio, Marzari, Alibert, Rayer, and Raymond, to Lombroso, Sandwith, Babes and Sion, and Sir Patrick Manson, can be traced the progress of the disease in Europe, from Spain to Southern France, Northern and Central Italy, Corfu, Upper Egypt, and other parts of Africa, Austria, Servia, Bulgaria, Roumania, Asia Minor, India, Mexico, Barbadoes, and portions of North and South America. The prevalence of the disorder in Europe may be estimated to a degree from its ravages in Italy, which has suffered more than any one other country. In Lombardy alone from the year 1770, when attention was first paid to the serious character of the endemic, to the year 1880 the number of *pellagrosi* increased from 20,000 to 104,067. It has been estimated that in a population of 16,689,735, of Northern and Central Italy, the proportion of those affected with the disease rose from 1 in 60 to 1 in 19 of the inhabitants.

The nature and manifestations of pellagra are well summed up in the circular issued by the British Committee: "It is a deadly endemic disease, usually presenting a long, cruel course of three, ten, fifteen, or more years' duration. It is confined almost exclusively to field labourers. It is characterized by a complexity of nervous, gastro-intestinal and cutaneous symptoms. The symptoms make their first appearance during the spring months, and recur year after year at the same season, remitting more or less during the winter months. Clinically, the more distinctive features are: a peculiar skin eruption, not unlike a severe sunburn, which affects the exposed parts of the body, followed by obstinate diarrhoea and profound melancholia, alternating with outbursts of violent excitement or delirium, which often lead to murder or suicide. In the last stages the patient becomes greatly emaciated, paretic, and completely demented. In women pellagra usually causes abortion; when they do have children the offspring are sickly and degenerate." The etiology has been summed up as "peasant life, poverty and polenta"; the symptoms as "dermatitis, diarrhoea, and depression."

A vivid description of the disease will be found in Edmond About's *Maître Pierre*. That well-known writer visited the Landes of the Gironde in 1857, and gives an account of attempts to drain the swamps and to render the soil fertile made in the middle of the last century. Speaking in 1844, the heroine of the story, Marinette, tells of her childhood, how her father and mother and herself were attacked at the same time by pellagra. She goes on: "You, sir, do not perhaps know what pellagra is. In that case you are as wise as the doctors. It is a disease which comes from no one knows where, but when it leaves this region nobody will trouble to ask news whither it has gone. In the meantime it is computed that there are 3,000 sufferers from the disease in the Landes. Some say it is the air, others it is the water, others it is the food. The blame is laid on the millet seed, on rye, and on maize; even on sardines and salted eels. The fact remains that it is a disease which does not attack the rich. It commences in the stomach, but soon reaches the surface, like a noxious weed which flourishes rankly everywhere. It soon does for a pretty girl, and changes her so much that her lovers run away when they see her. The skin becomes black; then come pimples, and a covering of powdery scales. When the hair is attacked it is much worse. You see that mine is not bad now, at that time you would not have touched it. My mother wasted so quickly that you could have seen the flame of a candle shine through her body. My father went to a doctor . . . who ordered good wine and roast beef, but he could not give us these remedies, and so my mother went out like a poor lamp without oil. My father placed me with a neighbour, and continued to work in the fields ill and tired as he was. Every night he came back weaker, and we tried to eat, but had no taste for anything. In the morning he hardly knew how to keep on his stilts. His nerves were so disordered and his head so weak, that sometimes when he wanted to go forward he took several steps backward. It was like a boat which glides down stream when the oars are no longer worked. I well knew that his courage was dead, and when he sat on the bench with his head between his hands I saw something dark in the depths of his eyes. But I did not know what to say to him by way of comfort, and I wept uselessly on his knees. At last he despaired more than is permitted to a man to do. The stress of his disease decided him to leave me alone in this world, and he forestalled the hour which, nevertheless, was not far off. I awoke as in the middle of a bad dream before his dead body, and for a moment I asked myself what was that phantom hanging from the beam of the roof? The neighbours rushed in on hearing my screams. I was taken away from the house and was very ill." How Pierre nursed the poor little thing back to health by good food and wine, which she often threw in his face, is charmingly told, but the reader may be referred to the original for it. It is sufficient to say that the text of the book is the unhealthiness of the Landes when they were undrained. Pierre says:

"Each time I heard news of any one's death I put it down to pellagra. When I met a funeral I took off my cap to the poor corpse and shook my fist at pellagra. I muttered between my teeth a proverb which says:

> Tant que Lande sera lande,
> La pellagre te demande.

I defied the hideous disease and wrestled with it in dreams. I felt myself strong enough to upset earth and heaven to drive it away from us. I said to myself, I will not count the cost, and if there is no other means of deliverance I will change the face of the country. The Lande will no longer be *lande*." In 1880 Emile Trélat, in speaking to the Société de Médecine Publique, said pellagra had disappeared from the Landes.

Till recently it was thought that the mystery of pellagra had been solved, and in an obituary notice of the late Professor Lombroso which appeared in the *Times*, his work in elucidating its etiology was trumpeted forth as a great discovery. Yet Creighton in the *Encyclopaedia Britannica* (1885) had called attention to the significant fact that "compared with the maize zone the area of pellagra is a mere spot on the map"; and its continued prevalence in Italy and other parts of Europe and its appearance in America have rudely borne in upon us the fact that we do not know much more about it than the doctors of Marinette's day. The problem has become one of practical importance for those in whose hands are the destinies of our colonies, and we hope the small sum needed for the investigation on foot will be forthcoming.

British Medical Journal.

SATURDAY, MARCH 19TH, 1910.

THE DOCTOR AS PATIENT.

THE doctor is proverbially a "bad patient." He is nervous, and almost always takes the gloomiest view of his own case. It is not that he has less fortitude than the average man, but that he has more knowledge. He can appreciate the significance of apparently trivial symptoms; he knows the possible developments and complications that may be lying in wait for him; he knows, too, better than any one else the limitations of the healing art. Of all these things the ordinary patient is in blissful ignorance, but the doctor broods over them, magnifying them out of all perspective—unless, indeed, his illness has reached that degree when merciful Nature laps the sufferer in an Elysium of indifference. The doctor when smitten with disease is at once sceptical and credulous; he is apt to be doubtful both as to diagnosis and treatment, and from the same cause unreasonably hopeful of benefit from remedies which he fancies more suitable to his case. He is often suspicious of the skill of the professional brother who ministers to him. This characteristic of the doctor as patient was well hit off by Du Maurier many years ago when he depicted a sick doctor as rejecting the suggestion of his anxious wife to call in such or such an oracle of science with the too frank admission, "We all go in for calling each other quacks now." We have known the last days of a poor young man dying of pyaemia embittered by his own baseless belief that he was suffering from acute rheumatism and was being wrongly treated. Yet the observation of the phenomena of disease in his own person by a skilled observer has necessarily a special value. We therefore call attention to a paper, published at page 682, in which Professor Wesley Mills of Montreal relates his own experiences as a patient. He summarizes his case, as follows: "A patient that had been previously very free from disease had for years shown some symptoms of enlarging prostate. He suffered from a bad bladder heredity, which explains the origin of the condition. After palliative treatment there was prostatectomy. Out of this and subsequent complications there arose a condition of things that resulted in the patient taking an anaesthetic three times; having to learn to walk afresh three times; submitting to unlimited catheterization by means of the three kinds of instruments; much irrigation for an infective cystitis; formation of a bladder abscess and fistula; and being confined to bed at different times for a period amounting in all to about four months—a vast experience full of new light on many things that it is hoped may be helpful to him in this state of existence and those subsequent ones in which he must now more than ever believe." It should be added that the operation was performed in England, where also the patient remained during the period of convalescence. Dr. Wesley Mills's experience of surgeons and nurses is, therefore, exceptionally large, extending as it did over a considerable time, but having been gained on both sides of the Atlantic.

From this experience he learnt many things. One of these is that pain—which is sometimes thoughtlessly said by people who try to administer spiritual comfort to a sufferer to have a purifying effect—is, when it passes beyond the degree when it serves as a warning, an unmitigated evil. It has been said that in order to realize the feelings of a patient a doctor should himself have suffered from the disease with which he has to deal. This is rather a hard saying, and, with regard to many conditions, it has no more truth than the famous parody, "Who drives fat oxen should himself be fat." Yet, as far as the sense of pain is concerned, the principle is undeniably sound. Professor Wesley Mills most truly says that "to him that has never felt real pain a description of a toothache is mere sound signifying nothing." In connexion with pain one is naturally led to speak of anaesthesia. Dr. Wesley Mills tells us that the first time he was anaesthetized in this country was a revelation to him. We are surprised to read his statement that much of the administration of anaesthetics on the American continent as compared with that in England, where it is carried out by professional experts, seems to him barbarous. His suggestion that students should be trained by such experts has long been acted upon in our hospitals. In connexion with anaesthesia he speaks of the sense of isolation and loneliness which comes over a patient recovering from the condition—a feeling which he thinks is but little known. We have sometimes seen the manifestation of it, however, and we particularly remember a man who on recovering consciousness after a severe operation clung to the surgeon's hand, exclaiming in piteous tones, "Oh, Mr. ——, I thought you had left me!"

Another thing on which Dr. Wesley Mills justly lays great stress is the manner of passing a catheter. He says brilliancy and rapidity in this manipulation are not to be encouraged. He describes in vivid terms the pain and disagreeable shock caused by the passage of a metallic catheter, and his experience has led him to the conclusion that the urethra is the most sensitive and most dangerous reflex tract in the whole body. He suggests, therefore, that every student should pass both a soft rubber and a metallic catheter on himself. We may mention that this was a point strongly insisted upon by Sir Henry Thompson, who used to say that there was no instrument in his armamentarium, including the sound and the largest-sized lithotrite, which he had not passed on himself. We remember how vigorously this teaching used to be denounced by a colleague of his, and we are disposed to regard it rather as a counsel of perfection than as an essential part of medical training. Dr. Wesley Mills gives a most thrilling description of shock. Pain, he says, one can to some extent describe, but shock is beyond words. He wishes that every member of the profession could have this experience for two minutes, as it would be invaluable to him, but he would not wish the worst human fiend the experience of two hours of shock. We commend this utterance of a man who knows by experience what he is talking about to the antivivisectionists who spare no term of abuse in denouncing the cruelty of the experiments of Dr. Crile, which had for their object the discovery of the nature of shock and the means of preventing this hideous form of suffering. Dr. Wesley Mills thinks that the concentrated wretchedness caused by shock is not realized by surgeons generally, or they would concern themselves more about the matter

In his own dark hour, when every one else about him failed, there came to him a ministering angel in the form of a young nurse in training, who, he says, "seemed to slowly draw me out of a hopeless slough of awful misery by methods of human sympathetic appeal that perhaps only a woman has at command."

This brings us to Dr. Wesley Mills's experience of nurses. In the course of a year he saw enough of about a hundred of them to give him ground for some strong convictions. He would rule out from the profession at least three classes of women—namely, those without that subtle but most vital quality, tact; those whose hands are incurably clumsy; and lastly, the amorous nurse, whom he describes as more or less dangerous for patients, students, and young doctors. He might have added that even elderly men are not always proof against the wiles of these Delilahs. It is gratifying to find Dr. Wesley Mills bearing witness to the professional efficiency and sympathetic attention to every detail bearing on the comfort and welfare of the patient, and also to the high degree of general culture of several of his London nurses. Dr. Wesley Mills's opinion that a medical man on starting on his career should not only know all a nurse does and a great deal more, but to be able to do all that she can do, is worthy of particular attention. On this point we are strongly in agreement with him. We have often had occasion to observe the ill results of a doctor's ignorance of the details of nursing. He ought at need to be able to change a draw sheet or give an enema. If he can carry out his own instructions he will be more implicitly obeyed by the nurse, just as a naval officer who can "haul, reef, or steer" has his men better in hand than one who has only the "bookish theorick." There is one London hospital where the need of such instruction for the medical student is fully realized, and it were to be wished that such instruction were universal—even if, as Dr. Wesley Mills suggests, the time needful for it were taken from that now given to anatomy, physiology, chemistry, and pathology.

There is much else in Dr. Wesley Mills's paper to which want of space prevents reference. The record of his personal experience is full of matter of the most instructive character for all practitioners of the healing art. As we have said before, whatever else a doctor may be wanting in—manners, general knowledge, and even special knowledge of his own craft—one quality he must have if he is to gain the confidence of the suffering man or woman: that is the power of sympathy. Some men can express this better than others, like the famous accoucheur of whom the Parisian lady said, "*Ce pauvre Dubois;* one would think he had had a baby himself!" But all must feel it in some measure if they are to be more than mere prescribers of pills or carvers of human flesh. An unsympathetic doctor is unfitted for the practice of a profession whose function is the relief of suffering. Sympathy will even give the hand of lesser experience the daintier sense. It will also give the power of unconscious suggestion, the effects of which Dr. Wesley Mills recognized in his own person. Perhaps the fruits of his experience cannot be better summed up than in his description of his ideal surgeon as "a man who, with all the general and special professional knowledge and skill of the day, illustrates, perhaps even more than the physician, that state of mind which results from contact with at least a little of every important department of culture; and who is possessed of that rarest and most valuable of all human gifts—the power to put one's self in another's place."

THE MEDICAL TREATMENT OF THE POOR.

BY his article on "The Medical Treatment of the Poor," published in the SUPPLEMENT this week, Dr. Cooper shows that he is to be added to the growing list of medical men who are convinced that the present form of contract medical practice is altogether unsatisfactory, and that the present time, when sickness and invalidity insurance seems about to be made compulsory, is the best opportunity for reform that has ever presented itself. It may be doubted whether the enormous number of persons to be dealt with under any Government scheme is fully realized. Mr. Asquith has estimated the total wages fund of the country at from 700 to 750 millions sterling a year, and there are about 13,000,000 wage earners. In Germany, which has a population of over 60,000,000 compared with our 43,000,000, persons insured under the three insurance schemes for sickness, old age and infirmity, and accident, benefited during the year 1902 to the extent of about 21 millions sterling; of this amount the State contributed in round numbers two millions sterling, employers ten millions, and the insured themselves nine millions, so that the insured received about twelve millions over and above their own contributions. In Germany the old-age pensions from the insurance only amount to about a million sterling, but in England the State itself already pays a sum estimated, for 1909, at 8¾ millions in old-age pensions; and we have the Workmen's Compensation Act for accidents. It may at once be granted that the sums allowed for invalidity pensions in Germany would not be thought adequate in England, and there is quite as much dissatisfaction among medical men in Germany with the remuneration they receive for their services under the insurance schemes as there is in England with the remuneration from the friendly societies' medical clubs. It is also necessary to point out that in Germany compulsory insurance only applies to certain classes, and only to those having a total income under (about) £100 a year, though the opinion has been expressed that this limit should be raised so as to include all receiving up to £150 a year. Persons earning more than this could hardly expect to receive anything from employers or from the State towards their insurance premiums. But, whatever limit is fixed, if insurance is made compulsory, there will probably be several million persons not now insured who will have to be insured for medical attendance, and the great question which the profession has now to consider is, How shall this medical attendance be provided?

First of all, it will never be satisfactory for a State insurance department to make any arrangement which would involve a continuance of the present club system on a vastly extended scale. Neither do we see any reason why the medical profession should allow any friendly or other society to come between the profession and the Government insurance department in respect of medical attendance. There would be the greatest objection to any scheme by which the Government practically drove millions of working men to join friendly society medical clubs, if it were left for the societies to arrange for medical attendance on the cheapest possible competitive terms, as is avowedly their policy at present.

Again, isolated local initiative with local combinations among medical men, such as that at Norwich, excellent though their local results may have been in some places, so far only touch the outer fringe of the business, and it is more than doubtful whether local initiative will be sufficient, and even whether local management would be effective in the greater part of the country, especially in the large towns. The apathy of most medical men is not only discouraging to those who appreciate the importance of preparing for action, but is a very real danger. A grumble at the British Medical Association is often the extent of their active interest, and even though a good scheme for a public medical service has been provided by the Central Council of the Association for adoption by any local Division which is active enough, there seems reason to fear that local enterprise is not sufficiently advanced to respond to the necessity that immediately faces us. The friendly societies are everywhere powerful, the medical profession is not; and if the terms were left to be arranged locally, there would be almost certainly places where the profession would get the worst of the bargain as it has in the past. The matter really has two sides; it is not only necessary to take measures to extend the control and influence of the profession over its own work, but to retain the limited amount of control and freedom it already possesses. Some great general scheme managed by the profession as a whole, or by some representative body of the profession covering the whole country and centrally organized, is required; and everything points to the British Medical Association as the only representative body.

Has the time come when the British Medical Association should approach the Government and offer to provide or to arrange for the provision of medical attendance for all persons compulsorily insured for sickness on terms to be arranged for the whole country between the Government department and the profession? The terms of any such offer would have to be very carefully considered, and it might perhaps be advisable to limit it to home and outpatients, with the proviso that satisfactory provision were made by the insurance department for suitable dispensaries, and either for proper co-ordination with existing charitable hospitals, or, failing that, the provision by the department of institutions for the use of the insured. Provision for medical attendance on midwifery cases ought certainly to be included, for in this way the difficulty now being experienced by the Local Government Board in inducing boards of guardians to listen to its appeals would be got over. By a proper adjustment of the proportions of the premium to be paid by the State and by parents, the impending difficulty about the medical treatment of school children might also be overcome. On the other hand, the treatment of paupers who themselves made no contribution to the insurance fund might be dealt with by the Poor Law department as now though on reformed lines, and such a scheme would not necessarily affect the present Poor Law medical service, except indirectly by reducing the number of those who quickly become wholly dependent on the rates when attacked by sickness; at the same time, the inclusion of paupers would not be precluded if it were deemed advisable, the State paying the premium. The British Medical Association could, of course, have nothing to do with the collection of the premiums, but while "sick pay" and infirmity annuities might be managed by the Government department, possibly through the friendly societies, medical attendance might be managed entirely by a special department centrally organized by the British Medical Association.

No better opportunity for inaugurating a centrally controlled medical attendance department under the auspices of the British Medical Association will ever again be offered. Through lack of a great association like our own, similar opportunity was entirely lost by the medical profession in Germany when compulsory insurance was first established. Everything was left to the local initiative of medical men, which largely failed, as there is fear it might fail in England. It is too soon to make suggestions as to fees, either as to their amount or the principles on which they should be paid, and it might not be essential to insist that the medical officers should necessarily be members of the British Medical Association, as the work would be done by the whole profession. The present haphazard work of ordinary sick clubs is wholly bad for the profession and always suspected by the public; to ensure the best possible medical attendance for the sick the work would have to be regularly inspected by inspectors of the Government Department and possibly by inspectors on behalf of the Association. The scheme is by no means the same as the provident dispensary scheme of the Majority Report of the Poor Law Commission. The principle of sickness and invalidity insurance agrees rather with the fundamental idea, claimed by the National Committee for the Break-up of the Poor Law as its own, that the best way of dealing with pauperism is by preventing it; but the insurance proposed aims at preventing it in a way that would not only lessen the poor rates but would have a far better moral influence—that is, by the timely assistance of self-providence. The British Medical Association has an opportunity of aiding in that good work not only with advantage to the profession, but we believe with the greatest advantage to the community. The Association would seek no monetary profit; it asks only that medical assistance for the working classes under any insurance scheme shall be put on business lines instead of on the half business and half sham philanthropic lines of the past.

THE MEDICAL PROFESSION IN SOUTH AFRICA.

A RECENT issue of the *Transvaal Medical Journal* throws a comprehensive light on the present position of the medical profession there, containing as it does an expression of view by that journal itself, a report of an address on the subject delivered by Sir Kendal Franks before the Cape of Good Hope Branch of the British Medical Association, and detailed accounts of meetings of some half-dozen official and unofficial medical bodies. Sir Kendal Franks held, and in a variety of ways, direct and inferential, showed, that at the beginning of the existence of a United South Africa the medical profession in that country finds itself in a condition, socially, ethically, and politically, not only far below its deserts, but below that which is its lot in other countries. For some of these drawbacks the speaker blamed the medical profession itself, but he blamed still more the lack of any means by which it can rid itself of its black sheep, and also the general attitude of other classes towards it, and, among authorities, that of the Colonial Secretary for the Transvaal, General Smuts. It would seem that he is practically the ruler of the profession and its work in that colony, for the post of chief medical officer has been abolished, and, though there is still a Medical Adviser, the Colonial Secretary is not obliged to

consult him. The truth of the views expressed by Sir Kendal Franks is confirmed by some even more outspoken remarks made at the dinner of the Transvaal Medical Society by Dr. W. T. F. Davies, President of the Transvaal Medical Council, in the presence of Lord Selborne and of several of his principal Ministers. On the whole, therefore, it seems reasonable to conclude that, whatever its origin and motive, the Colonial Secretary's attitude towards the medical profession is calculated to be detrimental to its well-being and influence. Among the specific instances quoted by Sir Kendal Franks is his treatment of the medical men forming the honorary medical staff of the Johannesburg General Hospital. He has deprived them even of the advisory voice in the management of its affairs which they formerly possessed. This is a retrograde step as gauged by current opinion elsewhere based on infinitely greater experience in the matter than General Smuts can possess. In this country in particular an increasing degree of influence in the control of hospitals is being yearly accorded to members of the medical profession, and, as is admitted on all hands, with great advantage. A letter referring to Johannesburg General Hospital, published by the superintendent on the instruction of the Colonial Secretary, the actual writer being his assistant, appeared in the *Transvaal Leader* on January 13th this year. It was originally addressed to the chairman of the committee of the hospital, and gives that body instructions to the effect that it must reduce its charges to paying patients, and discourage such paying patients from exercising their right of being treated by their own medical attendants. The avowed object is to make medical treatment in hospital so cheap that the applications for admission to free beds may be reduced to a minimum. In other words, the object is to make the hospital a financial success at the expense of the medical profession. Apart from the coolness of this proposition itself, the whole tone of the letter is one to which the medical profession has a right to take exception. No public authority is justified in writing as if the views of medical men concerned were of no importance. Fortunately in the other South African colonies there would not seem to be any one in high office holding views analogous to those of General Smuts. But nevertheless, in these too the position of the medical profession would seem to stand greatly in need of improvement. Frank recognition of this is desirable, for there could be no more favourable moment for the introduction of a better state of things than that offered by the fusion of the South African colonies. The highest development of the country will be seriously retarded if there is any failure on the part either of the central or divisional governments to recognize to the full the extreme importance to the public weal of securing for the medical profession a position really in keeping with the benefit which it can confer on the body politic, and with the assistance which it can offer in the satisfactory administration of public affairs. Taking the civilized world as a whole, it may be said that Governments show an increasing desire to give practical effect to the old saying, *Salus populi suprema lex*, and the only drawback is that there is some tendency to forget that hygienic golden eggs cannot be hatched unless the bird which lays them is adequately nourished. The task of preventing this foolish oversight has been undertaken in this country by the British Medical Association, and its experiences prove that it is only by the medical profession sinking minor differences, for the sake of presenting to the public and to the Government a united front, and bringing to bear the whole weight of its influence at any desired time and at any desired place, that success can be achieved. By working on similar lines the medical profession in South Africa can achieve its own salvation and that of the public simultaneously.

WHO SHOULD PAY?

THE practitioner who would fain recover fees by suit at law is sometimes troubled at the outset by the question: Against whom must I bring the action? In the case of a regular patient the question does not arise, but where the doctor is called in suddenly on an emergency the zeal of the person who rushes off for medical aid is only equalled by his reluctance to pay fees when the time for payment arrives. Small wonder that the question, Whom shall I sue? is difficult to answer. The decided cases on the subject are few and far between. It is really a question of agency. One who is suddenly taken ill is often incapable of summoning medical aid. Another person has to act for him; but the mere fact that a practitioner attends a patient does not entitle him to sue that patient for fees. Failing the patient, who may take this technical point, the unfortunate practitioner is constrained to sue the person by whom he was actually summoned, and he may be "a man of straw"! Would that our courts might adopt the excellent principle recently laid down in France by the Seventh Chamber of the Tribunal of the Seine! It was there decided that if a doctor's fees are not paid by an invalid who is staying away from home, in lodgings, at a hotel, or under the hospitable roof of a friend, those fees may be recovered from the landlord or the host, as the case may be. Consequent upon this decision, *Le Matin* gives the following advice to its readers: "When you wish to invite a friend to stay with you, in the town or in the country, take care to satisfy yourself on two points: (1) Has he good health? (2) Is he in the habit of paying his doctor?" The sprightly journal goes on to point out that if this decision is not upset on appeal, the master of a household who is not satisfied as to the solvency of a guest who is taken ll at table, will suddenly say to his servants: "*Monsieur manque d'air . . . Transportez-le vivement sur un banc du square voisin!*" In other words, it will be necessary to disown your guest in France if you desire to avoid payment of his doctor's fees. The judgement (to take it seriously for a moment) is probably based on some interpretation of the *Code Napoleon*. The French point with satisfaction to this code, and say: "There is the law of France!" Yet it does not provide for everything, and the French Courts frequently have to interpret it. They found their judgements upon it, and these judgements constitute the case law of France. But the curious thing is that interpretation of the code by one judge does not bind any other judge. His opinion is like the *obiter dictum* of an English judge, which (as Mr. Birrell wrote) "is an individual impertinence which bindeth none, least of all the lips of him that utters it." The profession of medicine in France will not therefore be unduly elated, but we have not even so much as an *obiter dictum* to comfort the English practitioner, who is sent from pillar to post when trying to ascertain whom to sue. If called in suddenly by a stranger his only course is to seek payment in advance. This method, however distasteful and inconvenient, is sometimes effective for reasons which are not immediately apparent. We recall the case of an Irish doctor who had so often been "done" that he decided to venture forth no more without his fee in advance. One night a man came from a distance to get the doctor to see his wife. "I must have £2 2s. first," said the doctor from his bedroom window. He then overheard a

colloquy beneath his window: "Ye'd better pay him, Barney," was the advice of a friend to the afflicted husband; "sure the wake and the funeral would cost ye more than that."

"THE CRUSADE AGAINST DESTITUTION."

THE National Committee for the Break-up of the Poor Law now numbers, it is stated, something over 20,000 members, and the latest sign of its activity is the issue of a new penny monthly journal, *The Crusade*, the professed object of which is to promulgate the proposals of the Minority Report of the Poor Law Commission. In the opening article of the first number, published in February, among other reasons given for the "addition of a new journal to the already overburdened list of periodicals," it is stated that the movement "has no party ties, and cannot rely on the steady and consistent support either of party organizations or of the party press." The scope and purpose of the journal may be gathered from the titles of some of the articles which appear in the first two numbers: Mr. Sidney Webb gives "Reasons why there must be a national authority for the able-bodied unemployed," Mrs. Webb contributes a paper on "The workhouse cradle and who rocks it," and there are two articles on the new Labour Exchanges. In the first issue an attempt is made to gauge the opinions for or against the Minority Report of candidates at the General Election, from which it appears that down to the time of publication the Committee had received 268 replies in favour of the Minority and 33 in favour of the Majority Report, though it is admitted that those in favour of the Minority would be more likely to reply to the inquiries than those opposed to it. In the March number it is noted that Sir Robert Price has been fortunate in obtaining the first place in the ballot for private members' bills, and intends to introduce a "Break-up Bill," though it is not expected that there will be any opportunity for carrying it this year. The same number opens with a not altogether correct representation of the new "National Poor Law Reform Association," formed under the presidency of Lord George Hamilton. It seems to be taken for granted that the Majority Commissioners are prepared to let the Majority Report die. The fact is rather that it is seen that the essential principles of the Majority Report, which are absolutely opposed to those of the Minority, can quite as well be attained in several ways, and it is the principle rather than the machinery that is defended. The Minority Report depends very largely, if not altogether, on its machinery. The journal is supplied free to all members of the National Committee who subscribe 5s. or upwards, or it may be obtained for the special subscription of 1s. 6d. a year.

THE INTERNATIONAL HYGIENE EXHIBITION, DRESDEN, 1911.

A PRELIMINARY meeting was held on March 11th, at the Cecil Hotel, London, for the purpose of forming a British Executive Committee for the International Hygiene Exhibition, which is to be held next year in Dresden. Professor Pannwitz, of Charlottenburg, who is representing the Scientific Department of the Exhibition in Germany, delivered an address with the object of enlisting the interest, sympathy, and co-operation of British hygienists in the venture. After referring to the part which Great Britain and Ireland had played in hygiene, he sketched the history of the undertaking, and pointed out that as Gladstone has said that sanitary teaching is of more importance than the passing of sanitary laws, the German exhibition would attempt to supply this teaching by practical demonstration, and so set people thinking about the subject. He urged those present to take up the work with energy, and suggested that a British executive committee and a British honorary committee should be formed, and should be in regular communication with the Dresden committees. The speech was warmly applauded by an audience which included the Naval Director-General (Dr. Porter), Sir William Church, Sir William Leishman, Dr. Whitelegge (Home Office), Miss Anderson (Chief Inspector of Factories), Dr. Theodore Williams, and Dr. Bashford. Mr. H. W. Armit, who acted as secretary to the meeting, explained what had been done in this country to attempt to secure the co-operation of hygienists, and made allusion to the fact that, after the various Governmental Departments had been privately approached, both by Professor Pannwitz and by himself, the German Government was issuing a formal invitation to the British Government through the usual diplomatic channels to take an active part in the forthcoming exhibition. He further reported that the public offices, universities, and public institutions had already expressed sympathy with the project and had promised assistance. The Naval Director-General expressed his own approval of the manner in which the first steps were being taken, and Dr. Whitelegge asked a number of important questions as to the methods of procedure and limitations of the exhibition. Dr. Bashford and others also made remarks, and Mr. Armit, at Professor Pannwitz's request, replied. Professor Pannwitz then apologized for the extremely short notice which had been given of the meeting, and announced that he would wish to attend a larger meeting in the course of about four weeks, when he would have returned from Teneriffe whither he was conducting an international expedition to study the effect of high altitude and solar radiation on biological processes. Mr. Armit then proposed that the members present should constitute themselves the nucleus of the British Executive Committee, and that the committee should open an office at which the business of the undertaking could be carried out. He further proposed that the formation of the full committee and of the honorary committee should be deferred until the British Government had received, and replied to, the invitation of the German Government. This was seconded by Dr. Theodore Williams, and carried. The meeting broke up after Dr. Theodore Williams had proposed a hearty vote of thanks to Professor Pannwitz. It is understood that Mr. Armit will act as the organizer of the scientific department and Mr. A. H. Sigle as the business manager in the offices of the British Executive Committee.

THE AUSTRALIAN INSTITUTE OF TROPICAL MEDICINE.

AN important stage in the organization of the Australian Institute of Tropical Medicine has been reached, as Dr. Breinl, of the Liverpool School of Tropical Medicine, who was selected for the post of director by a committee consisting of representatives of the Royal Society and the London and Liverpool Schools of Tropical Medicine, arrived at Townsville early in January. The institute is under the general control of a committee appointed by the Universities of Sydney, Melbourne, Adelaide, and the Government of Queensland, and the director's first task will be to organize the institute, which will at first be conducted in an isolated building in the grounds of the Townsville General Hospital. The committee of that hospital has further undertaken to maintain in the wards of the hospital free of charge patients under special observation, and to give the director of the institute every facility for clinical investigation. His main duty will be to conduct

inquiries into the tropical diseases of Australia, to give instruction in tropical diseases, and to superintend research work undertaken in the laboratories. Dr. Breinl was entertained at dinner in Townsville on January 5th, when the chair was taken by Dr. Frodsham, Bishop of North Queensland, who, Dr. Ahearne said in proposing the toast of his health, had been largely instrumental in bringing the tropical institute to its present stage. In proposing Dr. Breinl's health, the bishop said that he looked forward to the time when there would be fine buildings—a second Lister Institute—in Townsville, but the institute already possessed an instrument without which the noblest building would be an empty shell: that was a man capable of directing its operations. He looked forward to a time when the best medical students of the Australian universities would go to the Institute of Townsville for courses of study in tropical medicine, and anticipated a large increase of scientific knowledge, a great alleviation of human suffering, and the better colonization of tropical Australia. To paraphrase the words of a great Frenchman, if the Australian tropics were to be colonized the conditions of life must be made as healthy as possible. There were medical men in North Australia who had already learnt by experience so much about tropical diseases that they desired to know more, and the motto of the institute would be co-operation, and its aim the advancement of medical knowledge. He had himself worked for the realization of the institute for four years, and at first found little support except from Dr. Gordon Ross and Mr. G. H. Pritchard; interest in the project gradually increased, but it would never have been realized without the assistance of Lord Chelmsford, Sir Charles Lucas, and their great benefactor, Mr. D'Arcy of Rockhampton. Dr. Breinl in his reply said that he had promises of support from the Australian universities, the State and Federal Governments, and of everybody in Townsville, especially the authorities of the Townsville Hospital; he could not be grateful enough to Dr. Ross in particular for the kind way in which he had placed everything at his disposal. He was prepared to give enthusiasm and hard work, but the success of the institute most depended upon the collaboration of the medical profession in making it a centre of research.

DR. HYSLOP OF PIETERMARITZBURG.

Dr. Hyslop, director of the Government Lunatic Asylum, Pietermaritzburg, Natal, was presented last month with his portrait by a number of friends as a mark of their appreciation of his services in many capacities to the colony. The presentation was made by the Chief Justice, Sir Henry Bale, who said that he had never been called upon to perform a more pleasing duty, because during the twenty-seven years he had known Dr. Hyslop his influence had ever been uplifting and stimulating. The medical department owed its success largely to him, and Dr. Hyslop had gained the esteem of the members of his own profession, for they had appointed him time and again to the highest offices which it was in their power to bestow. As a volunteer militia officer also Dr. Hyslop had done work which had won for him distinction from his Sovereign and and an abiding place in the memories of colonists. Dr. Hyslop, in expressing his thanks, said that all through his career in Natal he had received the most loyal help, and the same was true of the work he did during the Boer war, because he was fortunate during that time in securing the assistance in the field of some of the best men. Dr. Hyslop, who graduated M.B., B.Ch., at Edinburgh in 1879, was appointed to his present office in 1882. He has been President of the Natal Branch of the British Medical Association, and he has served as delegate to the annual meetings of the Association on numerous occasions. He is President of the Natal Medical Council, and has been President of the South African Association for the Advancement of Science, and of the South African Medical Congress. He is a member, and was at one time chairman, of the Health Board, and is a member also of the Pharmacy Board. He has served for twenty-eight years in the Natal militia, and is now Lieutenant-Colonel on the staff and P.M.O. He was P.M.O. of the Natal volunteers during the South African war, 1899–1901; was present in Ladysmith during the siege; and was twice mentioned in dispatches. He was also P.M.O. of the forces during the Natal native rebellion in 1906. The portrait, which was painted by Mr. Fiddes Watt, of Edinburgh, represents Dr. Hyslop in his uniform as colonel of militia, and Mr. R. D. Clark, chairman of the committee which organized the testimonial, stated that the portrait would not only be a lifelike reminder of Dr. Hyslop to his friends, but would be a valuable addition to the art gallery of the city.

THE MEDICAL BENEVOLENT FUND GUILD.

The British Medical Benevolent Fund Guild, founded some four months ago to help the British Medical Benevolent Fund by making its objects better known, and by assisting distressed members of the medical profession, their wives, widows, and families who are beneficiaries of the Fund. It seeks, by personal sympathy and help, to get into touch with all the sorrow and trouble of this class, which can only suffer in silence. Its keynote is personal service, and among the cases with which its Associates have to deal are many to whom the gift of clothes would be as good as money, leaving the recipients free to use the dole of 5s. a week for board and lodging only. The Council of the Guild therefore appeals for gifts of clothing, especially, we are told, for women's clothing. Parcels may be addressed care of Miss Ruth West, 11, Chandos Street, Cavendish Square, London, W., and the name and address of the donor should be enclosed, so that an acknowledgement may be sent. The Guild also wants men's clothes, especially morning coats, and those of our readers who have garments which, though serviceable, have, for some reason, lost favour with them, could not dispose of them better than by sending them to the Guild. The Guild is also glad to have other gifts in kind, including books and magazines, coal tickets, and so on. It asks also for convalescent letters, and, it need hardly be said, will gratefully receive donations in money. The ladies who comprise it consist of Members who contribute not less than 10s. 6d. annually, and Associates who, while contributing not less than 2s. 6d. annually, are willing to take an active part in the work of the Guild. A leaflet, giving further particulars, can be obtained on application to the Honorary Secretary, British Medical Benevolent Fund Guild, 100, Harley Street, London, W.

INTERNATIONAL EXPEDITION TO TENERIFFE.

Some time ago an International Commission for the study of the effect of high altitude and solar radiation on medical and biological conditions was constituted, and Professor Pannwitz of Charlottenburg was appointed President. This commission has sought for some suitable place where the investigations entrusted to it could be satisfactorily carried out, and some little time ago the Peak of Teneriffe was selected. In view of the favourable conditions obtaining in the Canary Islands, and especially at the spot chosen, it was felt that it would be wise to study meteorological and astronomical as well as biological and medical problems. Geh. Rat Professor

Dr. Hergesell, the President of the International Commission for scientific aërology gladly joined in the project, and when the observatory on the Peak of Teneriffe was opened, the German Emperor presented the commission with a transportable house, in which the scientists engaged in the work could live. On Sunday last Professor Pannwitz started from Southampton with the members of the expedition, including Professor Barcroft and Dr. Douglas of Cambridge, Geh. Rat Professor Zuntz of Berlin, and Dr. Neuberg, Dr. J. Mascat, the astronomer and colleague of M. Flammarion of Paris; Dr. Plasse (France), and Professor During and Professor H. von Schrötter of Austria. The programme includes the study of the effect of solar radiation (heliotherapy) in the treatment of pathological conditions; the continuation of the researches on biological processes at high altitudes, commenced by Professor Zuntz on Mont Rosa; and further observation of Halley's comet. A certain amount of preliminary work in meteorology has already been undertaken by Professor Hergesell and his assistants, and in this work the Prince of Monaco has materially assisted by lending his yacht, and by supporting the observatory in many ways. The Peak of Teneriffe offers special advantages for astronomical observations, and the German Emperor has evinced much interest in this aspect of the undertaking. The extraordinarily clear atmosphere at the Peak, which is situated well above the cloud line and stands some 7,000 feet above the sea, renders the observatory a very suitable place for studying the comet. The Spanish Government has shown its interest by undertaking to extend the observatory, and has already provided it with telegraphic communication.

THE "BROWN DOG" IN CHANCERY.

THE friends of the "Brown Dog" are denouncing his removal as an outrage to their tender feelings. An application was made to the Court of Chancery for an injunction against the Battersea Borough Council. But in the meantime the Dog was, to use the expression of one sympathetic paper, "abducted." The Court had to recognize the *fait accompli*, but an action for the restoration of the monument which has cost the sentimental people of Battersea so much is threatened. We should think the "Dog" must be a nuisance to them; but some of his friends evidently see in him possibilities of political capital. The *Star* announced his removal on a poster which could scarcely have been more thrilling if it had recorded the doom of the House of Lords, and made the event a pretext for an attack on the Moderates, who, according to a headline, "hastily get rid of accusing monument." An "accusing monument" it certainly is; it is not, however, the Moderates whom it accuses, but the antivivisection fanatics who put it up and seek to perpetuate a foul slander, of which the people on whom they are striving to thrust it back have become heartily ashamed. We note with amusement that the Swedish lady, Miss Lind-af-Hageby, who is good enough to try to develop the humanitarian sentiment of the British people—with the aid of "chuckers out"—has written to complain that the Battersea Borough Council has shown "the fear of publicity which is characteristic of the defenders of vivisection." We should have thought that the writer of the *Shambles of Science* had had publicity enough to make her wish to retire into private life for the rest of her days.

BRITISH PRACTITIONERS ABROAD.

THE General Medical Council has issued a useful pamphlet, entitled, *A Report as to the Conditions under which Medical and Dental Practitioners Registered or Legally Qualified in their own Country may Practise Abroad*. The information includes particulars as to the regulations in force in the dominions and colonies of the British Empire. The report has been carefully prepared, under the supervision of the Registrar, by Mr. King, a member of the Council's staff, from information in the possession of the Council, supplemented by particulars furnished by many of His Majesty's representatives and other officials in various parts of the world. The report has an index, and is prefaced by a list of the questions to which answers are usually required. In the paragraphs on the several countries the particulars are given under the reference numbers attached to the questions. In every case the address of the official to whom requests for further information should be sent is stated, and the preface points out that as the requirements of various countries are liable to change, it will always be advisable for a British practitioner who thinks of settling abroad to write, before leaving home, to the official mentioned for the necessary information and latest details. In this way trouble and disappointment on arrival will be avoided. The preface further states that while every effort has been made to ensure correctness, the information contained in the pamphlet must not be regarded as official. So far as we have been able to test it, the information is in accordance with that in our possession at the present time. The pamphlet is published by Messrs. Spottiswoode and Co., and can be obtained through any bookseller, price 1s.

THE SECTION OF NAVY, ARMY, AND AMBULANCE.

THE programme of the business of the twenty-one sections of the Annual Meeting of the British Medical Association in London this year is published with certain revisions and additions in the SUPPLEMENT of this week. Of the additions, the most important is that which enumerates the subjects suggested for discussion by the committee of the Section of Navy, Army, and Ambulance. As will be seen, some of the subjects are of interest to all military medical officers, others concern more especially those in the Royal Navy Medical Service, those in the Royal Army Medical Corps, or those in the Royal Army Medical Corps (Territorial). It will also be observed that there are three secretaries, one representing each service, and it is requested that members who desire to contribute to the discussions should communicate with that one of the honorary secretaries who represents the service with regard to which the member proposes to make a contribution.

THE Oliver-Sharpey lectures before the Royal College of Physicians of London will be delivered by Dr. F. W. Mott, F.R.S., on April 22nd and April 29th, at 5 p.m., the subject selected being the cerebro-spinal fluid.

SIR ALFRED KEOGH, K.C.B., who retired recently from the post of Director-General of the Army Medical Service, which he had held since 1905, has been appointed Rector of the Imperial College of Science and Technology. The Imperial College was incorporated under Royal charter on July 8th, 1907, to carry on the work of the Royal College of Science and the Royal School of Mines, and, under the conditions of the charter, the Central Technical College of the City and Guilds of London Institute has become an integral part of the Imperial College, under the title of City and Guilds College. The Imperial College so constituted was admitted a school of the University of London in the faculties of science and engineering in July, 1908. In the buildings of the college at South Kensington some of the sections of the approaching meeting of the British Medical Association will be held.

Medical Notes in Parliament.

[FROM OUR LOBBY CORRESPONDENT.]

Medical Inspection by Public Vaccinators.—Last week Mr. Ramsay Macdonald asked the President of the Board of Education if sixty-three public vaccinators had been appointed as medical inspectors for elementary schools under the Education (Administrative Provisions) Act by local education authorities; whether the Board agreed that these two offices should be held by the same person; and whether any communication to that effect had been made to local education authorities. Mr. Runciman said that the answer to the first part of the question was, so far as the information of the Board went, in the affirmative. He thought that the second part of the question referred to the Local Government Board, who prescribed the qualifications of public vaccinators, and this part of the question should be addressed to the President of that Board. With reference to the third part of the question, it was the practice of the Board, when it found a reference to vaccination in the schedule of medical inspection adopted by a local education authority, to remind the authority that care must be exercised on this point, and that the information obtained by medical inspection should in no case be used as the basis for action under the Vaccination Acts. He might add that the Board of Education was not in a position to require of local education authorities that members of their medical staffs should refrain from holding other public appointments.

Defective Teeth (Children).—In reply to Mr. Charles Bathurst, Mr. Runciman said that a summary of the information at the disposal of the Board on the subject of the condition of the teeth of those children in public elementary schools who were medically examined in the year 1908 would be found in the recently issued report of the Board's chief medical officer, pages 53 to 57. The report showed that the number of children with defective teeth was considerable, but the information at present at the disposal of the Board was not sufficient to enable it to form a precise estimate of the percentage of children in public elementary schools who were suffering from defective teeth. He was not aware that any medical officers had been so rash as to attribute the defects in children's teeth solely to the consumption of any one particular article of food, such as white bread made of flour from which the germ had been mechanically extracted. Asked as to making inquiry into the cause, Mr. Runciman said that he was afraid this defect was not peculiar to children in elementary schools alone. An inquiry could not be started until the whole of their information on medical inspection had covered the ground. To institute the inquiry suggested would be carrying medical inspection much further than was contemplated by the Act, but it was not outside the bounds of possibility.

The Medical Inspection of School Children was raised in a general question by Mr. France, and Mr. Runciman said that the reports received from local education authorities relating to the work of medical inspection during the year 1908 were reviewed in the annual report of the chief medical officer of the Board for that year, which was issued last January. A few reports had been received in respect of the year 1909, and these would in due course be reviewed in the next annual report of the chief medical officer. The Board had reason to believe that satifactory progress was being made, but he was not in a position to make any statement as to the results of medical inspection beyond that which was contained in the report. As to the action of the local authorities, he said that his information was that all the local education authorities were already fulfilling their duties under the Act, or taking such preliminary steps as would enable them to fulfil them at the earliest possible moment.

Inspector of Medical Services.—Lord Claud Hamilton asked what were the special circumstances which called for the creation of the appointment of Inspector of Medical Services; and what were the particular duties performed by this officer which were not already performed, and had been in the past, by administrative army medical officers of divisions and districts. Mr. Haldane replied that the appointment of Inspector of Medical Services was made on the recommendation of the Inspector-General of the Forces with a view to placing the medical services in line with the other arms of the service in regard to independent inspection. The special duties of the Inspector were to report to the Army Council as to the manner in which the sanitary and administrative work of the army was being carried out and to assist in co-ordinating methods of medical inspection. These duties were fully set forth in paragraph 26, King's Regulations.

X-rays Injuries.—Mr. Bottomley asked the Prime Minister on Monday whether he would consider the advisability of granting a pension on the Civil List to Mr. Cox, who had suffered from his studies in the use of the *x* rays, and had recently had an arm amputated. Mr. Asquith said that a substantial grant from the Royal Bounty Fund was awarded last April, but he would give the most sympathetic consideration to any further representations.

Administrative Medical Officers.—On Monday last Captain Faber asked the Secretary of State for War if he would state whether administrative medical officers would receive any remuneration other than their fifteen days' training pay, seeing that all officers appointed to head quarters except these officers received £150 a year. Mr. Secretary Haldane replied that these officers received no other remuneration than their pay for training; they had a staff officer in receipt of £100 a year. In one or two cases where there was a vacancy for a staff officer they were allowed £80 a year during the vacancy. It was a mistake to suppose that all officers appointed to head quarters except these received £150 a year.

Anthrax Infection.—On Tuesday Mr. Haddock asked the Parliamentary Secretary to the Board of Agriculture whether his attention had been called to the infection of anthrax being conveyed through insufficient disinfection of the holds of vessels and wagons which had carried hides, horns, etc., previous to carrying feeding stuffs and fertilizers; and whether he could take steps to prevent such causes of infection. Sir Edward Strachey replied that he was aware of the possible danger of infection in the manner referred to, and he had issued a notice to shipowners on the subject.

The Public Health (Scotland) Act (1897) Extension Bill—"to extend the powers and provisions of the Public Health (Scotland) Act, 1897, with respect to the construction and carrying of sewers to water mains and pipes of statutory trustees and commissioners of water undertakings"—was presented last week by Sir James Gibson and supported by Mr. Clyde, Mr. George Younger, Mr. Cleland, Mr. Murray Macdonald, and Mr. Barnes.

INSURANCE AGAINST UNEMPLOYMENT.

THE *Daily Telegraph* states that the Government's promised scheme of insurance against unemployment will be introduced by the President of the Board of Trade, Mr. Sydney Buxton, in the House of Commons before Easter. The chief points in the scheme are, it is stated: 1. Both workpeople and employers will contribute. 2. Their contributions will be supplemented by a substantial subvention from the State. 3. The system will be one of insurance by trades. 4. Within the specified trades, the system will be compulsory upon all, unionists and non-unionists, skilled and unskilled, workmen and employers alike. The scheme will apply to the following trades: (1) House building and works of construction, (2) engineering, (3) machine and tool making, (4) ship and boat building, (5) vehicles, and (6) sawyers, and will include general labourers working at

these trades, which have been chosen for the first application of insurance as a group in which unemployment is regular and persistent; they are believed to cover half of the field of unemployment. When a worker loses employment he will take his card to the nearest Labour Exchange, which, in conjunction with the State insurance office, will be responsible for finding him a job or paying him the benefit, which will be somewhat lower than that which the trade unions pay. There will be a weekly payment for the period of unemployment, and the benefits will require between 5d. and 6d. a man to be raised weekly.

Ireland.

[*FROM OUR SPECIAL CORRESPONDENTS.*]

THE LATE PROFESSOR ALEC FRASER.

OWING to the untimely death of Professor Alec Fraser, his widow has been left in very straitened circumstances. To help her a subscription list has been opened, and the following have either promised or sent in the amounts opposite to their names. Those who have promised and those intending to subscribe should forward their subscriptions without delay to the honorary treasurer of the fund, Dr. William Taylor, 47, Fitzwilliam Square West, Dublin.

	£	s.	d.
John Lentaigne, President, R.C.S.	10	10	0
Robert H. Woods, Vice-President, R.C.S. ...	10	10	0
Sir C. A. Cameron, C.B., Secretary, R.C.S. ...	10	10	0
Sir Thomas Myles, F.R.C.S.	10	10	0
Sir Charles B. Ball, F.R.C.S.	10	10	0
John B. Story, F.R.C.S.	10	10	0
Henry G. Sherlock, F.R.C.S.	10	10	0
William Taylor, F.R.C.S.	10	10	0
Sir Henry R. Swanzy, F.R.C.S.	10	10	0
Sir Arthur Chance, F.R.C.S.	10	10	0
R. Charles B. Maunsell, F.R.C.S.	10	10	0
T. E. Gordon, F.R.C.S.	10	10	0
Edward H. Taylor, F.R.C.S.	10	10	0
R. Lane Joynt, F.R.C.S.	5	5	0
Sir Lambert Ormsby, F.R.C.S.	5	5	0
R. Bolton M'Causland, F.R.C.S.	3	3	0
W. I. Wheeler, F.R.C.S.	3	3	0
D. Edgar Flinn, F.R.C.S.	3	3	0
G. Jameson Johnston, F.R.C.S.	3	3	0
Sir W. Thornley Stoker, F.R.C.S.	10	10	0
A. Francis Dixon, M.D., D.Sc.	10	10	0
S. Horace Law, F.R.C.S.	5	5	0
D. Kennedy, F.R.C.S.	5	5	0
Professor Windle, M.D., F.R.S.	5	5	0
His Honour Judge Shaw	5	5	0
Professor Arthur H. White	4	4	0
Henry Stokes, F.R.C.S.	4	4	0
L. G. Gunn, F.R.C.S.	3	3	0
P. W. Maxwell, F.R.C.S.	3	3	0
David Turner, F.R.C.S.	3	3	0
C. A. K. Ball, F.R.C.S.	3	3	0
Trevor N. Smith, F.R.C.S.	2	2	0
R. R. Leeper, F.R.C.S.	2	2	0
Seton Pringle, F.R.C.S.	2	2	0
A. W. W. Baker, F.R.C.S.	2	2	0
Henry W. Oulton, F.R.C.S.	2	2	0
A. J. Smith, F.R.C.S.	2	2	0
George Sheppard, F.R.C.S.	2	2	0
Arthur H. Benson, F.R.C.S.	2	2	0
W. J. Hepburn, F.R.C.S.Edin.	2	2	0
H. R. C. Rutherford, F.R.C.S.	1	1	0
J. M. Redington, F.R.C.S.	1	1	0
W. L. Murphy, F.R.C.S.	1	1	0
Dr. G. C. Sneyd	1	1	0
D. N. Morgan, F.R.C.S.	1	1	0
C. M. Benson, F.R.C.S.	1	1	0
W. M. Courtenay, M.D.	1	1	0
Charles Greer, F.R.C.S.	1	1	0
Dr. C. B. Pasley	1	0	0
Mrs. Gleeson	1	0	0
Miss Gleeson	0	10	0
Students R.C.S.I., per T. M. Thomson, Esq....	11	4	4
Total	263	12	4

DUBLIN UNIVERSITY BIOLOGICAL ASSOCIATION.

The annual dinner of the Dublin University Biological Association was held at the Dolphin Hotel on March 12th. After the toast of "The King" had been suitably honoured, Professor Geddes proposed the toast of "Dublin University," which was responded to by the Provost, who in an interesting speech sketched the political history of Trinity College during the last thirty-five years, and gave some personal reminiscences of the various crises the college has passed through. The toasts of "The Guests," "Dublin University Biological Association," and "The President" were then successively proposed and replied to, and the dinner finally terminated with "Auld Lang Syne." During the evening several songs and recitations were contributed by various members and guests.

BRITISH MEDICAL TEMPERANCE ASSOCIATION.

At a conversazione given by the President and Council of the Dublin branch of this association last week at the X. L. Café, Professor Carpenter delivered a lecture on alcohol and human life. Amongst the numerous facts to which he called attention one of the most interesting was that the lumbermen in Canada, when experiencing extreme cold, break open their stores of whisky and throw away the supply lest they should give way to the temptation to drink it, knowing from experience that the effect would be to reduce the temperature of the body. At the same meeting, the Honorary Secretary of the association deplored the fact that there were only twenty Dublin members out of a total membership of 7,000 throughout the United Kingdom, and expressed the hope that one of the results of the meeting would be a rapid increase in the numbers of the Dublin branch.

FEES OF DISPENSARY MEDICAL OFFICERS' SUBSTITUTES.

A case of some interest to dispensary medical officers was lately heard before Judge Moore at the Quarter Sessions, Tipperary. The plaintiff, Dr. O'Ryan, sued the board of guardians for the full sum of £16 16s., for acting as substitute for Dr. O'Callaghan, the dispensary medical officer. Dr. O'Ryan had been appointed substitute for four weeks, at a salary of four guineas a week, but during his period as locumtenent he fell ill, and Dr. Moloney was then appointed in his place for a period of five days, at a salary of a guinea a day, which the guardians decreed was to be deducted from Dr. O'Ryan's remuneration. The case turned on the question whether a substitute for a dispensary doctor is entitled to the same privileges as the dispensary doctor himself, inasmuch as the board of guardians is legally liable for the payment of a substitute in the case of illness of a dispensary doctor. The judge reserved his decision until the next day, and then gave a decree in favour of the plaintiff for the full sum of £16 16s. It is stated that the guardians intend to appeal.

MEDICAL SUPERINTENDENT'S RESIGNATION.

At the last monthly meeting of the board of the Monaghan and Cavan Asylum an application was read from Dr. R. L. Donaldson, resident medical superintendent, asking to be superannuated after a service of twenty-five years in the institution. About twelve months ago Dr. Donaldson was attacked by a patient, and as a result of the injury he then received in the back, he has since been incapacitated from discharging his duties. A resolution of sympathy with Dr. and Mrs. Donaldson in his continued serious illness was passed, and the full allowance of £400 a year was granted.

AWARD FOR BRAVERY.

At a recent meeting of the Sligo Board of Guardians Dr. P. J. Flanagan, medical officer to the workhouse, was presented by the chairman with an illuminated certificate from the Society for the Protection of Life from Fire, in testimony of the prompt aid rendered by him at a fire. While engaged in household work in the workhouse porter's lodge a girl's clothes caught fire, and she rushed out of the house in terror. Dr. Flanagan saw her, and succeeded in extinguishing the flames by wrapping his overcoat round her.

Scotland.

[FROM OUR SPECIAL CORRESPONDENTS.]

Nursing Homes for the Middle Class.

In connexion with the proposal for the establishment of a private nursing home in Edinburgh adapted for patients from whom only a small sum can be asked in the way of charges for maintenance and nursing, a conference has been held under the auspices of the Charity Organization Society. It was attended by delegates from the Edinburgh Branch of the British Medical Association, from the Edinburgh and Leith Medical Practitioners' Association, from the Board of Management of the Royal Infirmary, and from the Charity Organization Society. Professor Lodge, vice-president of the Charity Organization Society, presided. The scheme submitted was one for the establishment of a self-supporting private nursing home of approximately fifty beds, in which the charges would range from one to three guineas a week for maintenance and nursing, the initial expenses to be raised by subscription from the public and from the profession. A full general notice of the scheme was published in these columns on February 19th.

It was arranged that the delegates of the British Medical Association and of the Edinburgh and Leith Medical Practitioners' Association should remit the memorandum for the further consideration of the two bodies which they represented.

Odonto-Chirurgical Society of Scotland.

The annual general meeting of the Odonto-Chirurgical Society of Scotland was held in Edinburgh on March 11th, Mr. J. Morris Stewart, President, in the chair. The society was founded in 1865, and has now a membership of 110. Office-bearers were elected for the ensuing year, after which Professor F. M. Caird read a paper on epithelioma of the jaw.

In the evening the annual dinner took place in the Princes Street Station Hotel, when fifty-six members and guests were present. After the President, who was in the chair, had given the toast of "The King," Mr. C. F. Sutcliffe, L.D.S. (South Shields), gave the toast of "The Imperial Forces," and Mr. Gordon Campbell (Dundee) replied; Mr. Thomas Wallace, F.F.A., F.I.A., gave "The Odonto-Chirurgical Society," and the President replied; Professor Caird gave "The Edinburgh Dental School," and the Dean (Dr. Guy), who replied, said that both as a philanthropic and as an educational institution, the Dental Hospital and School were making great forward strides every year. Mr. R. Lindsay, L.D.S., in giving the toast of "The Royal Colleges of Physicians and Surgeons," said that he looked forward to a time when the dental profession would be more closely linked with the College of Surgeons than now, and even to a time when dentists might become Fellows of the College; the two Presidents replied. Mr. Cotterill referred to the defects of the teaching of dental students, and pointed out that any dentist could come up for the Fellowship of the College now if he were prepared to face the examination, and also that dentistry was one of the special departments of surgery for that Fellowship. Mr. J. Douglas Logan, L.D.S., gave the toast of "The Guests," and Mr. W. M. Cuthbertson replied. Mr. T. E. Johnston gave the toast of "The Chairman," and Mr. Gordon Campbell that of the Secretary. Music, instrumental and vocal, stories, etc., helped to make a pleasant evening.

The Treatment of Consumptives in Edinburgh.

A public health subcommtttee of the Edinburgh Town Council agreed on March 3rd to recommend to the full committee that an arrangement should be entered into whereby the information collected by the dispensary of the Royal Victoria Hospital for Consumption as to the conditions of different persons affected should be placed at the disposal of the medical officer of health, the corporation in return contributing £450 per annum. The other proposal, that a limited number of beds in the hospital should be placed at the disposal of the medical officer of health for the treatment of early cases of consumption which came under his observation, at a cost not exceeding £1,000 per annum, was deferred.

The Proposed Scheme for New Lecturers at Glasgow.

At the last meeting of the University Court the proposal sent from the General Council, that distinguished graduates who, on application to the Court, should be deemed fitted should be appointed lecturers in the university, was finally thrown out on the ground that, after carefully considering the recommendation of the Council, the Court was of opinion that effect could not be given to it under the ordinances. The nature of the Council's proposal was recently described in these columns, when it was pointed out that the suggested scheme entailed what amounted to the establishment of intramural competitive lecturerships.

Professor John Cleland.

The executive committee in charge of the movement for recognizing the long and distinguished services of Professor Cleland to the University of Glasgow, has decided to present his portrait to the university, and a replica to Mrs. Cleland. The work will be undertaken by Sir George Reid, R.S.A., and will be facilitated by the fact that both artist and sitter are now permanently settled in Somerset within a few miles of each other.

Glasgow and Cancer Research.

In the report submitted at the annual meeting of the subscribers to the Glasgow Cancer Hospital, held on the 9th inst., it was stated that a commencement had been made with the work of the research department. The accommodation for this work in the new wing of the hospital included a room for the director of research, a microscopical room, a chemical laboratory, a sterilizing and working room, and a museum, which also served as a lecture room. The expense of such a research department had been heavy, but the directors were hopeful that the public would contribute generously to the upkeep of the department. Already about £1,500 had been subscribed, but at least £5,000 would be needed.

England and Wales.

[FROM OUR SPECIAL CORRESPONDENTS.]

NEWCASTLE-ON-TYNE.

Edinburgh University Graduates' Club.

The annual dinner of the North of England Edinburgh University Graduates' Club, at which Professor Alexis Thomson was the guest, was attended by about 70 members and friends. The chair was occupied by Dr. Robert Anderson, to whom was entrusted the toast of the evening, "Alma Mater." In a speech marked at times by considerable eloquence, the Chairman reminded those present of his early association with Edinburgh University fifty years ago, and also recalled the names of several of the distinguished professors who had been his teachers, as well as of many fellow students now holding high positions in the world of medicine. Professor Thomson made a masterly reply, his speech being much appreciated. The toast of "Sister Universities" was proposed by Professor Rutherford Morison and responded to by Sir Thomas Oliver. By his old friend, Dr. G. H. Hume, was fittingly proposed the health of the President. Much of the success of the evening was due to the excellent arrangements made by the Honorary Secretary, Mr. T. Gowans.

The Northumberland and Durham Medical Society.

Last week the Northumberland and Durham Medical Society received as its guest Mr. C. B. Lockwood, F.R.C.S., of St. Bartholomew's Hospital. In the afternoon of March 10th Mr. Lockwood lectured in the

College of Medicine on amputations at the hip-joint and shoulder-joint, advocating the ligature of the main vessels in all amputations. In the evening a banquet was held in the large hall of the College of Medicine, and was well attended. The President, Dr. E. H. Davis, of West Hartlepool, occupied the chair. After submitting the Royal toast, the President invited Professor Rutherford Morison to propose the health of "Our Guests." This was done with special reference to Mr. Lockwood, who feelingly acknowledged the kindness of which he had been the recipient that day, paid a high compliment to the surgery of, and to the medical instruction given in, the North of England, and also spoke in appreciative terms of the beauty and equipment of the Royal Victoria Infirmary. Professor G. R. Murray, in rising to propose the toast of the Northumberland and Durham Medical Society, met with a most cordial reception. The toast was acknowledged by the President. An excellent dinner and most enjoyable music were provided by the Honorary Secretaries, Dr. W. E. Hume and Mr. Willan.

LECTURE ON MENDELISM.

On March 9th Mr. W. H. Young delivered a lecture, under the auspices of the Natural History Society, at the Hancock Museum, Newcastle, on Mendelism: The Experimental Study of Heredity. After describing the results of Mendel's well known experiments on garden peas, carried out for eight years in the garden of the monastery in Moravia, of which he was Abbot, Mr. Young said that since that time the theory had been applied to great numbers of plants and animals by Bateson, Lock, Punnett, Biffen, and others, and in a surprisingly large number of cases the law had been found to hold good. One result of Biffen's experiments had been to produce a strain of wheat which was found to be immune to attacks of "rust." This was placed on the market last autumn, and the results of its cultivation were being awaited with interest. The Egyptian Government had granted £2,000 for experiments on cotton on Mendelian lines. In the case of human beings, of course, experimental methods were out of the question, and, therefore, reliance must be placed on pedigrees. Some few diseases or defects, such as eye-colour and colour-blindness seemed to indicate Mendelian succession; but there was as yet no proof of its occurrence in tuberculosis, cancer, insanity, or epilepsy. The study of Mendelian inheritance had reawakened interest in the problems of heredity, and the production of species, which, from an experimental point of view, had languished since Darwin first swept the field. Mr. Young then discussed the mutation theory of de Vries, which seemed to indicate that Nature did not await the slow and imperceptible aggregation of characters going to form a fixed species, but proceeded in leaps.

COLLEGE OF MEDICINE LECTURESHIPS IN SURGERY AND MATERIA MEDICA.

It is now publicly announced that Mr. H. B. Angus and Dr. Thomas Beattie have been nominated by the College of Medicine for the vacant lectureships in surgery and materia medica. Both appointments are most popular, and have given great satisfaction.

MANCHESTER AND DISTRICT.

MEDICAL REPRESENTATION ON PUBLIC BODIES.

NEXT to representation of the medical profession in Parliament, it is felt in Manchester to be most essential that the City Council and the Boards of Guardians should contain members of the profession who can advise on medical matters directly within the province of the medical officer of health, which often seriously affect the interests of general practitioners. It is quite certain that on several occasions in the past, action has been taken by Manchester authorities through sheer ignorance of the damaging effect on the profession, and in no sense from intentional opposition to it. Fortunately, however, during the last few years there have been medical men on the council, general practitioners themselves, well able, and what is more, always ready to voice the opinions of their fellow practitioners. An instance of this occurred in the City Council at its meeting on March 2nd, when Councillor Dr. Skinner complained that the Watch Committee had made a medical appointment without advertising it in the medical press; he thought that just as in advertising for an engineer, the advertisement would certainly be put into the engineering journals, so advertisements for medical appointments ought to appear at any rate in the BRITISH MEDICAL JOURNAL and the *Lancet;* he moved that the appointment be referred back to the Watch Committee for further consideration; though this proposal was lost, the Chairman of the Watch Committee gave an undertaking that future appointments should be advertised in the medical press. The same feeling that medical representation on public bodies is essential actuated the Joint Committee of the Manchester and Salford Divisions in its recent recommendation that two medical men should be nominated as candidates at the next election for the Manchester Board of Guardians.

THE NORTH MANCHESTER MEDICAL UNION.

The annual dinner of the North Manchester Medical Union was held at the Grand Hotel, Manchester, on March 8th, Dr. W. G. Booth, president of the union, presiding. The union consists of about forty medical men of the North Manchester district, many of whom are members of the British Medical Association, and it was formed, several years ago, partly for social and partly for medico-political purposes, largely because North Manchester is a district of itself, with special local interests. In a large city like Manchester, though there are four Divisions of the British Medical Association, each comprises numerous districts with their own distinctive interests, and unions like that of North Manchester may serve a useful purpose in bringing medical men into closer social contact while in no sense being opposed to the Divisions. Suggestions have from time to time been made that the whole of Manchester should form one Division, and there are some undoubted advantages in the proposal, especially when united action in city affairs is under consideration. But if such a union of the present Divisions took place, there would certainly be some necessity for quite a number of local committees to deal with local interests which vary very considerably over so large an area.

About thirty members and guests sat down to dinner, and, after the usual loyal toasts, the President, in a few well-chosen words, proposed the "North Manchester Medical Union," which was responded to by Dr. Lee and Dr. Skinner. Dr. Fraser next proposed "The Visitors," and the toast was acknowledged by Dr. Reynolds, Dr. Taylor, and Dr. Fletcher. The evening was enlivened with a number of songs and recitations and by some remarkable conjuring tricks by one of the medical men present. The health of the President (Dr. Booth), proposed by Dr. Coutts, was most heartily received.

RINGWORM IN SCHOOL CHILDREN.

The Medical Officer of Health for Salford has sent out a circular describing the steps taken by the authorities to diagnose ringworm in children before excluding them from school. It is stated that the school nurses examine the heads of all children and obvious cases of tinea tonsurans are submitted to the school medical officer for diagnosis before the children are excluded. In suspicious cases, hairs are removed and submitted to Professor Delépine for microscopic examination, and on his certificate that the fungus or its spores are present the children are excluded, so that every case is either diagnosed by the school medical officer or by Professor Delépine; full information respecting any case will be given to the medical attendant on his inquiring personally or by post. It is further stated that all cases will be examined by the school medical officer before the children are readmitted to school. The Education Committee has made arrangements for the treatment of ringworm in school children by the *x*-ray apparatus at a fee of 2s. 6d. a case, irrespective of the number of

applications required, and the medical officer of health announces that any practitioner desiring this treatment for any of his cases is requested to acquaint the medical officer, who will make the necessary arrangements.

WEST YORKSHIRE.

The Bradford School Clinic.

A large meeting of medical men and dentists took place under the auspices of the Bradford Division of the British Medical Association on March 8th, to consider the school clinic. Dr. Metcalfe, Chairman of the Division, after welcoming the attendance of the dentists of Bradford, who, he said, were looked on as professional brothers by the medical profession, pointed out that it was the intention of the Education Committee to appoint a dentist in connexion with the school clinic, and the dentists were interested in endeavouring to see that if such an appointment took place the professional abuses which the medical practitioners in the city had found to their cost were associated with the medical portion of the work were not introduced into the dental. The position of the medical men in Bradford was rather difficult, as the school clinic was originated and medical inspectors who also undertook treatment were appointed before the British Medical Association had taken any action in the matter. If the policy of inspection separated from treatment had been adopted, as advised by the British Medical Association, friction would not have arisen. The Bradford Division had on repeated occasions considered the question. Special committees, watching committees, and deputations to the Education Committee, had been appointed. It was felt that the treatment of the minor ailments, such as verminous heads, running ears, sore eyes, and some skin diseases, especially ringworm, must in the last resort be left to the school clinic, but the contention of the medical men was that patients should always be first recommended to see their own doctor, and only if they were not in a position to pay for medical treatment relegated to the school clinic. The doctors held that although in theory the Education Committee said that this was done, as a matter of fact children whose parents were well able to pay for medical treatment were being constantly treated at the public expense. The certificates, too, of the medical practitioners were not accepted as sufficient evidence of the child's fitness to return to school without further examination by the school medical officers. Dr. Wherry Willson gave numerous examples of cases which ought not to have been treated at the school clinic. He urged that the way in which the clinic was managed was a great injury to them, both as medical men and as citizens. Mr. Matthews, Mr. Thew, and other well-known dentists said that they were in favour of the appointment of a school dentist, but hoped no abuses would arise in connexion with the appointment. Mr. North, chairman of the education subcommittee of the Bradford City Council, who was present, and Dr. Williams, medical superintendent of the Bradford schools, controverted some of the statements put forward. They, however, laid stress on the desire of the authorities to work harmoniously with the medical profession of Bradford. If any cases of abuse were laid before them they would investigate them thoroughly, and do all in their power to meet the wishes of the doctors.

The long and animated discussion will undoubtedly do good, and the members of the medical profession of Bradford are quite willing to wait and see if matters improve. It is sincerely hoped that they will; but if they do not, there is no doubt that some more drastic steps must be taken to prevent the further progress of what is assuredly becoming a serious evil.

Bradford Royal Infirmary.

The report presented to the eighty-fifth annual meeting of the Royal Infirmary drew attention to the fact that the number of patients was continually increasing, and that the infirmary was no longer able to cope with the demands made upon it. The site for a new infirmary had already been acquired—one of the best and most suitable in the country; £67,000 had already been raised, and when the total reached £100,000 operations would begin. The great difficulty appears to be to raise an adequate amount in annual subscriptions. When the new hospital has been built these must be largely increased, and it is hoped that the presence of a modern infirmary may stimulate the generosity of the undoubtedly rich citizens of Bradford.

LONDON.

The British Red Cross Society.

A meeting was held at the Mansion House, under the presidency of the Lady Mayoress, on March 10th, for the purpose of forming a City of London branch of the British Red Cross Society. In opening the proceedings Lady Knill said that the object of the British Red Cross Society was to furnish aid to the sick and wounded by providing additional comfort and help, to complete during peace the necessary organization throughout the country for that purpose, so as to secure the best results; and to undertake the formation of voluntary aid detachments in conformity with the requirements of the Army Council and the Territorial Force Associations. Sir Frederick Treves described the nature of the work, and the necessity of preliminary organization to prevent confusion, waste, and suffering. During the Boer war the society expended £162,000 in aid of the sick and wounded soldiers and sailors; but as there were four or five different organizations there had been some overlapping and bungling, and the British Red Cross Society desired to perfect the organization during peace by forming branches in every district, so that the women of each could minister to the sick and wounded of their own counties. Those who were willing to give their personal assistance must undergo practical and thorough preliminary training in order to do properly the valuable work that voluntary aid detachments were capable of doing. A formal resolution appointing a committee under the presidency of the Lady Mayoress was moved by the Lord Mayor, seconded by Sir Melvill Beachcroft, and carried unanimously. The meeting ended in votes of thanks to Sir Frederick Treves and the Lady Mayoress.

A similar meeting was held in Kensington on March 14th, under the chairmanship of the Mayor, Sir Walter Phillimore, who said that four voluntary aid detachments had already been started. Sir Frederick Treves explained the organization, and Colonel Valentine Matthews, V.D., late London Counties R.A.M.C., the London County Director of the Society, expressed the hope that each of the twenty-eight boroughs in London would take part in the movement. A resolution approving of the scheme was adopted on the motion of the Bishop of Kensington, seconded by Major-General Sir Coleridge Grove, and an executive committee was appointed on the proposal of Lord Justice Buckley.

Feeding of Necessitous School Children.

The Education Committee submitted to the London County Council on March 1st a supplemental estimate of £10,000 in respect of the cost of feeding necessitous children. The sum was withheld in December last by the Finance Committee, which reported unfavourably on the Education Committee's administration of the Act, expressed alarm at the fact that the number of meals provided had increased from $4\frac{1}{2}$ to $7\frac{3}{4}$ millions, and, in calling attention to an item of £26 as the sum recovered from parents in one year, expressed the view that recovery of cost should be "the rule, and not the exception." The Education Committee took the opportunity of defending itself, pointing out that it had not availed itself to any extent of the power to feed non-necessitous children, on prepayment. Only really necessitous children were being fed, and therefore the recovery of anything more than a comparatively small amount could hardly be hoped for. As to the larger number of meals provided, the committee

stated that this only meant that individual children had received more meals a week; only about 2,000 more children had been fed weekly than last year. The committee reported various modifications in the procedure for selecting the recipients of meals, made in order to meet the suggestions of the Finance Committee. The estimate was approved.

Special Correspondence.

PARIS.

Académie de Médecine: Sir Dyce Duckworth on the Peculiarities of the Gouty Diathesis.

SIR DYCE DUCKWORTH, Bart., before a very full meeting of the Académie de Médecine, has just made a communication on The Peculiarities of the Gouty Diathesis, the fruit of forty years of clinical work and teaching.

The doctrines of the diatheses, which were established early in the last century, especially in the Paris Medical School, had, he said, been gradually neglected in recent years, and even Laycock of Edinburgh, who adopted them many years ago, was ridiculed for doing so. The institutes of pathological histology, and the extended use of the microscope did much to draw away the attention of teachers and students alike from the individual patient, and to fix it rather on the particular tissues involved by morbid processes. Minute researches in organic chemistry still further enlisted the devotion of clinical observers, and so patients became cases rather than individuals with distinct habits of body and special tendencies. At the present moment the study of bacteriology occupied a still larger share of attention, so that the specific microbe had almost become the unit of all medicine—the seed became all-important; the soil was of no importance. Sir Dyce Duckworth emphasized the supreme importance of particular habits of body pertaining to individuals, the study of which he considered fundamental, and absolutely essential for the best clinical practice, for each individual possessed a special tissue endowment with specific proclivities, and the personal equation had to be taken into consideration in each case. The soil was therefore quite as important as the seed. He recognized four distinct diatheses:

1. The *strumous* or *scrofulous*.
2. The *arthritic*, with proclivity, especially in early life, to rheumatic infection, and to gouty manifestations in later life.
3. The *nervous*, with instability of nerve centres; and
4. The *bilious*.

Owing to heredity, blends of these diatheses were met with, and were easily found, if carefully studied, in various families. He recognized that rheumatism (proper) was a distinctly infective disorder, therefore exogenous in origin; but true gout was an endogenous malady, arising from errors of metabolism in those arthritically disposed, but also dependent in some of its phases on nervous disturbance. He then described in detail the various manifestations of the gouty diathesis in the different periods of life in both sexes, and concluded by expressing the hope that the doctrine of the diatheses might never cease to be taught in the French schools of medicine, and that with continued research they might ever aid in the advance of our art for the benefit of suffering humanity.

BERLIN.

The Organization of Relief and Preventive Agencies.—The Prevention of Venereal Disease.

AT a meeting convened by the central committee of the Berlin Assistance and Advice Bureaux for consumptive, alcoholic, and cancerous patients (*Fürsorgestellen für Lungen, Alkohol, und Krebskranke*), Geheimrath Puetter, chief manager of the Charité and President of the Bureaux Committee, submitted a plan for centralizing the work of twenty-four different organizations for combating alcoholism, and reported on measures already taken. The meeting was attended by delegates from the chief police commissioners of Berlin and its suburbs, from the Berlin and Charlottenburg municipalities, from the State Insurance Department (*Landes versicherungs anstalt*), from the Society against the Abuse of Alcohol, and the Salvation Army. The Prussian Cultusministry and the chief lunatic asylums likewise sent representatives. Herr Puetter's plan is to make the Advice and Assistance Bureaux, with their permanent staff—spread over the city and suburbs as they are—into the centre and meeting-point of the various crusades. Thus he proposes that the nurses and "sisters" who work for the bureaux among the consumptive poor, should in future give a share of their attention to the unhappy families of dipsomaniacs, and wherever they find children touched with the hereditary taint, should bring these for examination and treatment to the out patient department for nervous diseases at the Charité. It must be remembered that in Germany *female* inebriety is practically non-existent. The State Insurance Department has already begun to pass on the habitual drunkards and dipsomaniacs on their lists to the bureaux. Early and comparatively hopeful cases are sent to the Good Templars' organization, while advanced cases with delirium, total loss of energy, etc., are transferred to the Salvation Army, to the Blue Cross Society, or to Herr von Bodelschwing's work colonies. The Salvation Army has declared itself willing to gather up and bring home, or temporarily house, persons found drunk in the streets, and this will no doubt materially lighten the work of the city ambulances. All such arrangements—and Puetter's plan contains many more than can be enumerated in a short letter—are comparatively easy to put in force, and are bound to have a certain measure of success. Far more difficult, however, as well as infinitely more important from the national hygiene point of view, will it be to get into touch with the initial stages of alcoholic disease. The Poor Law guardians and the large sick clubs have been approached, and some of the latter have already directed their doctors to notify early stages to the committee, which will then do its best to induce these persons to place themselves under the care of the bureaux. By treating the craving for alcohol, not as a vice, but as a disease admitting of cure, it is hoped that other inebriates may gradually come forward voluntarily. Obstinate resistance may be met by the threat of interdiction. Only where there is real danger to life and limb will police aid be resorted to. In order to carry out this huge organization efficiently considerable funds will be required, and the State Insurance Department, the Poor Law Guardians, and other authorities—the various sick clubs, charitable organizations, private subscribers—will all be laid under contribution.

The German Society for Combating Venereal Disease held its annual meeting last week in the hall of the Empress Frederick House, Professor Neisser (Breslau), presiding. Professor Blaschko (Berlin) read the report and commented on the society's work during the past year. The touring exhibition of wax models, statistical tables, and hanging boards with pictures and explanatory text had, he said, aroused much interest in the various towns. Efforts to make teachers acquainted with important facts connected with the work were steadily continued. The ways and means for arriving at a correct computation of the actual extent of sexual disease in Germany were being actively studied. Professor Neisser was able to inform the meeting that in the forthcoming Dresden Hygiene Exhibition in 1911, the department for venereal disease would be put in the hands of their society. He hoped this would prove a splendid opportunity for propaganda on a large scale. Professor Blaschko then read a paper on the supervision of prostitution as sketched in the first draft of the new Imperial Penal Code. He commended the position taken in the draft towards prostitution as towards an existing evil that cannot be stamped out by prohibitive measures, but must be met by wider and wider dissemination of a knowledge of hygiene. So long as punitive measures against prostitution exist, he said, they served only to increase its hygienic evils; nor can State registration and close medical supervision be commended as having given good results. In England and in Scandinavia official regularization had been abolished, and, nevertheless, venereal disease had materially decreased in both countries. Finally, the meeting unanimously adopted the following resolution:

> The German Society for Combating Venereal Disease welcomes the changes in the First Draft of the Imperial Penal Code, and determines on calling a conference of experts to exchange views on the principles for the supervision of prostitutes, and to submit the result of its considerations to the Imperial Government for its use.

Correspondence.

THE EFFECT OF ABDOMINAL COMPRESSION IN VERY RAPID HEART.

Sir,—Dr. Gordon's important communication in the Journal of March 12th, p. 624, suggests a hope that we may be coming within sight of definite progress in the pathology and the treatment of tachycardia. There is much in the clinical case and in the arguments which he adduces to lead us to conclude that paroxysmal tachycardia is not in reality a cardiac affection, but rather a vasomotor upset of the circulation. Every clinician has wondered why so sudden and intense a disturbance of the cardiac rate should be conspicuously characterized by the patient's almost complete immunity from cardiac distress during the attack, and should be compatible with a no less rapid recovery of cardiac efficiency and of cardiac endurance under exertion for prolonged intervals or for good. Dr. Gordon's reading of the mechanism of the upset seems to afford a better explanation than any previously proposed for the various paradoxes presented by the patient's symptoms, and also by the hitherto unaccountable effect of various measures of treatment, some of which might have been regarded as the very last to be fit to recommend, and as the least likely to succeed. Among other mysterious aspects which needed clearing up was the remarkable peculiarity that, alone among cardiac attacks, the paroxysm of tachycardia should not of necessity materially disturb the respiration. It may set up (apart from any purely *cardiac* effects of exertion during the paroxysm) neither *respiratory* dyspnoea nor any noteworthy *respiratory* tachypnoea. The inference to which we had held, that neither the lungs nor the heart could be primarily at fault, would now be getting more substantial confirmation. And, assuming as a further inference that we may be really dealing with a vasomotor storage congestion, Dr. Gordon's splanchnic theory would also be deriving considerable collateral support from the fact that it is certainly not the pulmonary reservoir which is the seat of the storage, as in many cases there is no essential interference with respiratory rate and respiratory efficiency such as any severe pulmonary congestion must inevitably have involved.—I am, etc.,

London, W., March 14th. William Ewart.

THE DANGERS OF ARYLARSONATES.

Sir,—The vendors of these dangerous compounds should most undoubtedly exercise the greatest care in issuing their booklets.

That atoxyl is dangerous is evident from the fact it turns yellow and decomposes in an hour or two in sunlight, and more quickly still if the solution has been sterilized. These considerations put "sterules" out of court. Soamin solution is more stable than atoxyl solution, but it too decomposes if exposed to sunlight and heat. We are supposed to take it for granted that tabell. soamin and orsudan are safe and that no decomposition takes place, but the onus of proof falls on the makers. An assurance that they have been freshly manufactured is therefore necessary. To supply them in 5-grain tabloids is open to objection, as will appear below.

The brilliant results obtained by Colonel Lambkin, together with the kind of literature Mr. Lane refers to, created the impression that the newer arsenical preparations are almost innocuous, but Colonel Lambkin's patients at the Rochester Row Hospital were mostly fine young men of good physique and healthy apart from the syphilis. In civil hospital practice the condition of the patients is quite different, and to ignore this is to bring the drugs into ill-deserved disfavour.

On looking through the reports of bad results in British and foreign literature, it will be seen that Hallopeau alone distinctly states the desirability of graduating the dose according to body weight. If this rule were followed a patient of 8 st. would be given exactly two-thirds of the dose that would be given to one of 12 st. That this should be a rule of practice would appear to be self-obvious. Moreover, these preparations have been given without any attempt being made to estimate the patient's powers of elimination, and have even been given in full doses to patients with kidney disease, arterial degeneration, and neuritis. Some of the bad results occurred in patients over 65 years of age, and here again full doses were administered. Gaubius's rules for dosage states that after 60 years of age inverse gradation should be observed—that is, if the patient is 64 the dose should be reduced 25 per cent. The directions given with the tabloids are explicit, "Dose one to two tabloids." These instructions are not suitable for every case. If the patient weighs 8 st. and is 64 years of age, the dose should be diminished some 30 per cent. on account of body weight, and an additional 25 per cent. on account of age if the maximum dose applies to a middle-aged person weighing 12 st. It is now many years since the rules of Gaubius were formulated, and in view of the increasing number of powerful drugs coming into use it is to be hoped that some effort will be made to lay down more precise rules for graduating the dose in subjects over 50 years of age.

As regards the new arsenical preparations, my own feeling is the maximum dose should never be given after 50 years of age, even if the kidneys are sound, the pulse not less than 72, and the patient ambulant. To give maximum doses regardless of body weight, age, etc, and especially to patients confined to bed or leading a very inactive life, is dangerous, but the fault is not with the drug but with the method of administration. I have used both atoxyl and soamin fairly extensively, and never had a bad symptom apart from a small nodosity at the point of injection, and that occurred before I discovered the necessity of a freer dilution of the drug. Tabloids I have never used, but have had the salts as required, partly because it seemed safer, but more especially because with tabloids accurate dosage is less easy.

Mr. Lane's communication and the cases of blindness appearing more especially in the foreign literature are calculated to excite nervousness, but there would appear less cause for alarm than for a more rational method of administration. In view of the wonderful results that occasionally follow their use, to throw up the arylarsonates in a panic would be unpardonable from a scientific standpoint—I am, etc,

London, S.W., March 10th. Charles Wray, F.R.C.S Eng.

Sir,—In his reply to Mr. Ernest Lane's letter on the dangers of arylarsonates, Colonel Lambkin states that 308 cases have been treated at the military hospital, Rochester Row, without any bad effects. In the first place, these negative cases are of no value against the positive cases reported by Mr. Lane and others, in which the administration of arylarsonates was followed by total blindness. Secondly, Colonel Lambkin attributes these disasters to decomposition of the drugs, which he says must be freshly prepared every day. I venture to remark that a drug which requires to be freshly prepared daily should be entirely banned. Lastly, in a recent article,[1] Colonel Lambkin stated his opinion that arylarsonates should not replace mercury in the treatment of syphilis, but that they are chiefly indicated in cases which are intolerant of mercury. Are we to understand that the 308 cases treated at the military hospital were all intolerant of mercury? If so, the proportion of such cases must be extraordinarily high among soldiers; if, on the other hand, they were not intolerant of mercury, it is reasonable to assume that treatment by arylarsonates was not indicated.

As regards the individual drugs, arsacetin is said to be free from the danger of decomposition and less toxic than atoxyl; but one of Mr. Lane's cases was treated with orsudan, which, I believe, is simply a trade name for arsacetin, as soamin is for atoxyl. Personally, I have not yet seen any cases of blindness due to arylarsonates, but I have recently treated two cases of severe syphilis in which they had been used. Whether they aggravated the disease it is impossible to say, but they certainly were not beneficial.

Considering the dangers of arylarsonates, it becomes questionable whether the treatment of syphilis by these drugs is justifiable. It is one thing to administer arylarsonates in sleeping sickness, for which there was no other known remedy; it is quite another thing to experiment with them in syphilis, a disease which is amenable to well known drugs of proved value.—I am, etc.,

London, N.W., March 12th. C. F. Marshall.

[1] British Medical Journal, August 14th, 1909, p. 380.

SIR,—Might I add my word of warning to that raised by Mr. Ernest Lane as to the dangers connected with the use of arylarsonates? I had, unfortunately, not read the paper by Drs. Lundie and Blaikie in the JOURNAL of January 22nd when a gentleman suffering from tabes came to me and requested that I should administer a course of soamin to him, as he had some tertiary skin trouble. I procured a fresh bottle of 100 1-grain soamin tabloids (Burroughs, Wellcome and Co.), and injected first 3 grains, then 5 grains, 7 grains, and finally 10 grains, until 45 grains in all were given (one injection every second day). The skin trouble cleared up, but the drug was stopped owing to increase in ataxic pains. He now suffers, I regret to say, from very impaired vision, the first symptom of which evidently began after 35 grains had been administered. The visual trouble, too, is progressing. As Colonel Lambkin, in his letter (p. 664), mentions technique, I may say that the solutions were freshly prepared at the moment from the tabloids with sterilized water, then boiled, and injected with a sterilized "glaseptic" syringe deeply into one or other thigh. No local trouble was caused.—I am, etc.,

Monkstown, co. Dublin, March 13th. R. LYNN HEARD.

SIR,—I esteem it a high honour that my letter on this subject in your issue of March 5th should have elicited a criticism from so eminent an authority as Colonel Lambkin, but I should have appreciated the compliment more had he not demonstrated that he had not taken the trouble to read my communication. I stated that I had given the treatment of syphilis by arylarsonates a trial, with which I was at first perfectly satisfied, but that ultimately, and not in connexion with the short series of cases I published, I had met with *one* case of double optic atrophy which had caused me to discard the method. In crediting me with having caused four cases of blindness by this treatment, Colonel Lambkin unduly overestimates my powers of perseverance in the method so ably advocated by him at the meetings of the British Medical Association at Sheffield and at Belfast. I stated, as I thought clearly, that I had met with one case of double optic atrophy from arylarsonates in my own experience, but that on reading the panegyrics on this treatment contained in a circular of Burroughs, Wellcome, and Co., received by me early in February, I made some inquiries, and in a very short space of time, and without any particular exertion on my part, I became cognizant of three other cases of the same nature.

As Colonel Lambkin states, I did not mention the technique I pursued in carrying out the treatment, for the excellent reason that there is no technique to be observed except that which is familiar to any one who is accustomed to the treatment of syphilis or other diseases by the intramuscular method. I was as well aware as Colonel Lambkin of the fact that these arsenical preparations were reported to be liable to decompose on keeping, and accordingly had them freshly prepared as they were required. My letter of March 5th was written with the object of warning the *younger* members of the profession from embarking on a treatment which might be fraught with such disastrous consequences, both to their patients and to themselves, if they relied too implicity on the glowing terms in which the treatment was extolled by an eminent firm of pharmacists.

In conclusion, I heartily congratulate Colonel Lambkin on his uninterruptedly successful career in this treatment, and also the British soldier on his immunity from one of the evils to which the rest of human flesh appears to be heir.—I am, etc.,

J. ERNEST LANE,
Senior Surgeon to St. Mary's Hospital and to the London Lock Hospital.

London, W., March 11th.

THE LOCALIZING VALUE OF UNEQUAL PAPILLOEDEMA.

SIR,—I am glad to see that Mr. Paton is clearly coming round to my point of view. As in all other matters of scientific observation, controversy is here out of place, since time will show what is true and what is not.

I will not, therefore, discuss over several pages of the JOURNAL (even if your hospitality permitted it) such further records of my cases as Dr. Paton gives in his letter, although I do not admit his accounts to be either full, or to convey complete pictures of the conditions present.

I must, however, point out that I have never changed my position on the question, and that I believe to-day, as I stated twenty years ago, that pressure is the chief factor in papilloedema, and fifteen years ago that most papilloedema is naturally present on the side of the lesion which causes it.

As I said at Belfast, all seeming exceptions to these rules must be accurately worked out in relation to the clinical conditions existing at the time the eyes are examined, and I quoted two private cases (Cases II, III) in illustrative analysis of apparent anomalies.

I hope that others will now take up the point critically, and trust they will find the rules as useful and comforting in practical work as I have.—I am, etc.,

London, W., March 15th. VICTOR HORSLEY.

CONSULTANT, GENERAL PRACTITIONER, OR HALF-AND-HALF?

SIR,—"Enquirer No. 2" (February 26th, p. 540) asks: "Is it . . . fair to the public that a consulting physician . . . should keep all his conclusions to himself until a general practitioner brings an anxious sufferer to him?" The consulting physician has no need to keep his conclusions to himself, for he can read papers before the different medical societies and publish cases, etc., in the medical journals, in which way his reputation would be enhanced, and general practitioners could avail themselves of the special knowledge of which the consultant thereby shows himself possessed.

"Enquirer No. 2" then refers to a consultation of half an hour. Why should a consultation necessarily be confined to a short period? My opinion is that many consultations should take much longer than this, so that the consultant can explain fully to the general practitioner what treatment he suggests should be carried out. In my opinion the consultant's fees should be raised, and should vary partly with the length of time a consultation takes, and partly, as now, with the means of the patient.

"Enquirer No. 2" refers to treatment which can only safely be left in the hands of a consulting physician. To what medical treatment does he refer that cannot safely be left in the hands of a general practitioner in these days when teaching is so excellent? For instance, does he refer to vaccine treatment? If so, surely this can be carried out by a general practitioner? If a general practitioner does not know how to carry out such treatment, a few minutes' conversation with the consultant will make him acquainted with the technique, which, after all, is little more than that of giving an ordinary hypodermic injection. The vaccine would, of course, be prepared by the bacteriologist, and the doses to be given decided by the consultant or by the bacteriologist.

"Enquirer No. 2" then goes on to say that general practitioners would wish to undertake operations which they are not capable of performing. Here I think the writer, perhaps inadvertently, does an injustice to general practitioners. We are dealing with an honourable profession and with honourable men, and I do not believe that general practitioners would undertake operations that they did not feel competent to carry out. The capabilities of general practitioners vary, but we should treat them as honourable men, and rest assured that none of them would undertake any operation that he was not justified in performing. I never suggested that a general practitioner should undertake every operation in all the special branches of surgery, and, as I said before, I do not believe that he would.

I maintain that every general practitioner should do every operation and every treatment that he is capable of carrying out.

"Enquirer No. 2" concludes by asking, "Is it fair . . . to exclude the sufferer from the benefits . . . of those who devote their lives to particular branches?" I have endeavoured to show that the public would not really be deprived of such benefits, but that in all cases in which the general practitioner felt that he was not justified in undertaking an operation, or certain treatment, he would ask the specialist to carry it out.

"Est Modus in Rebus" (March 5th, p. 603) says "that any patient is at liberty to 'consult' a consultant at his

rooms as often as he pleases," and remarks that the so-called consultant "should avoid asking the name of any doctor who had attended him previously." Personally, I should consider such a proceeding most unprofessional. Surely it is the duty of every practitioner, whether a consultant or not, to ascertain that a would-be patient is not being attended by any other doctor. I have never said that "a patient is to be considered the absolute property of his family doctor." What I maintain is that a consultant should not see a patient except in conjunction with a general practitioner.

Finally, to what treatment does "Est Modus in Rebus" refer, which can be carried out better by a consultant than by a general practitioner, other than such treatment as the general practitioner himself says he is not personally capable of undertaking? I have already asked a similar question in answering the letter of "Enquirer No. 2."—I am, etc.,

March 5th. ENQUIRER.

THE DIFFICULTIES OF MODERN PRACTICE.

SIR,—"A Yorkshire Doctor" is probably an example of many men in general practice—able, well equipped for work, enthusiastic, yet out of his sphere or not needed. The gist of this letter is the question whether most of us general practitioners are not needed.

With the fire of youthful enthusiasm damped and somewhat mellow, yet watchful of current events, I seem to see things in a better perspective than once I did. I see we are living in an age of transition, when the position we once held is severely assailed, when our oracular utterances are criticized, and we are expected to know our work better than formerly, and do more for the fees which we consider suitable.

The public kicks against illness that Providence sends, and, like us, too, feels the injury redoubled when payment to get well again follows. I think the event will be that medical aid will become more and more municipalized and we shall take our positions as properly-paid public servants without the necessity of pandering to unreason or fears for our position. The school inspector, medical officer of health, club doctor, parish doctor will be expected to do more and more, and the group of well-to-do or better-to-do private patients will alone be left for the scope of the general practitioner; and we as a class shall improve; we shall say and do what we think right, without endless talk and waste of time.

The existence of a living thing, apart from certain parasites which flourish exceedingly, or of vestigial remains which are largely pathological, depends upon its utility. If we are needful, with certain alterations we shall survive; conversely, if our utility has departed, we shall exist only as anachronisms. The modern practitioner who, finding himself in the shoes of the old, thinks to go on as did his forebears, will and does find himself grievously disappointed. The old-fashioned parish doctor is a thing of the past, and the club doctor must not regard his services as charity-given. "If he could not do it for so much he should not have taken on the job" is the criticism I often hear and feel. The new nurse, as "Yorkshire Doctor" says, does deprive us of revenue. But of what is she really depriving us? Is it not in most cases of a cheaply-gained reputation by watching dilating cervices, and a rush to prevent a "B.B.A."; of letting the patient think we are helping more than in point of fact we are? Is it not far better that we shall be summoned when help is wanted?

I realize that there is scope and sphere of utility for the well equipped, old fashioned general practitioner, but I seem to see scope and sphere that are, not without reason, rapidly diminishing; that his fees for work which others can do equally well are too high, that many of us (I am one) expect more than the public thinks suitable, that we are too highly educated and too respectable for the present sort of work, and that only men of some capital should become family doctors, realizing that medicine is a good profession but a bad business.

The sphere of the medical men like "Yorkshire Doctor" and myself is rapidly being divided amongst the various officials, and the grouping process is bound to continue, and in my opinion to the advantage of the public, however greatly to the disadvantage of our coterie.

I cannot help seeing the tendency and its probable rightness. Of course, we fight inch by inch, but it is a losing game. We really know terribly little, and it is a sad reflection to me that the confidence reposed in us is to so large an extent not justified. However little we know, of course the public knows still less, and that is a consolation which makes most of us continue in harness and not feel ourselves humbugs.

Out of the present somewhat chaotic state of things our descendants will emerge useful and trusted and less bothered and more scientific. The public will get less kindness and fatherliness from its medical advisers. Meanwhile it seems to me intending candidates for the profession ought to have some sort of idea what is to become of them when they are qualified.—I am, etc.,

Ilminster, Feb. 28th. W. H. MAIDLOW, F.R.C.S.

ST. WINEFRIDE'S WELL.

SIR,—The article on St. Winefride's Well which appears in the issue of the JOURNAL for March 12th conveys the impression that an official report of the proceedings should have been forthcoming, and I would like to state my reasons for withholding it.

It was proposed at a former meeting of the Division to hold the spring meeting at Holywell, and to request a local medical man to read a paper on the history of the wells. The substitution of a paper on Modern Miracles of Healing for the one originally proposed, and of a reverend father for a local medical man, occurred through interventions which I need not enter into.

The Rev. F. Woodlock's paper occupied the greater part of the time at our disposal, otherwise some of the members would have felt disposed to challenge the genuineness and *bona fides* of the cases cited as instances of miraculous cures.—I am, etc.,

Wrexham, March 14th. E. D. EVANS.

PSYCHICAL RESEARCH.

SIR,—Dr. J. Staveley Dick, in his letter (p. 477), says, in effect, that he has just begun to read about psychical research, and is rather impressed with the evidence adduced by Sir Oliver Lodge in favour of telepathy, and, therefore, "the subject is ripe for discussion and further investigation," for if "thought transference" is a fact it is "not merely a startling but an important fact." But he has not been able to obtain any information *pro* or *con.* from any of the standard textbooks on physiology he has consulted so far. He suggests that unless the medical profession are "prepared to relegate the investigation of such alleged brain function to distinguished amateurs, the Association might without impropriety do something towards a definite solution of this question."

Dr. Dick's rather patronizing and superior tone towards the Society for Psychical Research in general, and Sir Oliver Lodge in particular, may be forgiven, as he is evidently ignorant of the immense amount of scientific work, of the highest order, which has been accomplished by that society. But if he is really becoming interested in the subject of psychic research, as I gather from his letter he is, he will be well advised to study the published *Proceedings* of the Society of Psychical Research rather than trouble to search his works on physiology, and he will probably also find it an advantage to join the Society of Psychical Research (address 20, Hanover Square, W.), in which case he will obtain both the *Proceedings* and *Journal* of the society, and he can obtain back numbers at a reduced price.

When he is more familiar with the work of the society he will realize that whilst its active members are certainly distinguished (many of them are Fellows of the Royal Society) they are certainly not amateurs, but in the truest sense experts. He will also realize that it is rather late in the day to discuss whether the medical profession is prepared to relegate the subject of psychical research. For years the medical profession has consistently refused to entertain the study of this subject, and has calmly ignored the laborious spade work done by others. Now that that work is beginning to bear fruit and results being obtained which are attracting the attention of the scientific world generally it is surely rather beside the mark for us to talk about "relegating this work to amateurs."—I am, etc.,

C. KILLICK MILLARD, M.D., D.Sc.Edin.

Leicester, Feb. 22nd.

PART-TIME MEDICAL OFFICERS OF HEALTH.

SIR,—Though I feel reasonably sure that Dr. Martyn (p. 602) is not acquainted with my case, mine is one that might be added to his list. After many years' service as part-time medical officer of health, my council, when last the appointment became automatically vacant, appointed a newcomer of a few weeks' standing, a stranger to the neighbourhood, though nothing could be alleged against my work, which is proved by the fact that the Local Government Board has not sanctioned the appointment. The salary is a very small one; nevertheless, if the district council can defy the Local Government Board, it means that it can appoint a nominee of its own who, in the conduct of his work, can favour councillors who may be large ratepayers. At a small salary, a part-time medical officer of health can be made the slave of a council, and in view of this, there can be no disputing the argument that in certain cases a whole-time medical officer of health would be an advantage to a community. Where a large salary is paid, perhaps a man is above the temptation to subordinate his criticisms to the views of his annual electors. If the Local Government Board is the supreme authority, there is not so very much objection to part-time officers.—I am, etc.,

March 13th. RUSTIC.

GASTRO-ENTEROSTOMY IN ACUTE DILATATION OF THE STOMACH.

SIR,—Mr. Mayo Robson, in an address reported in your issue of January 8th, refers to the question of gastro-enterostomy in the treatment of acute dilatation of the stomach, and says that so far he knows of only one case—in his own practice. May I mention that seven years ago I resorted to this expedient as the last resource I could think of in a rather desperate case, and with the happiest result? An account of the case is given in the *Transactions* of the last Australian Medical Congress, vol. i, page 339.—I am, etc.,

Colac, Victoria, Feb. 9th. W. H. BROWN, M.R.C.S.

THE VALUE OF BALL'S OPERATION FOR PRURITUS ANI.

SIR,—The note by Dr. Leighton on p. 440 of the BRITISH MEDICAL JOURNAL of February 19th is interesting, and I venture to send my own experience, as it illustrates the value of an operation for the relief of "this horrid affection."

I first noticed any trouble about ten years ago, but pain was then the prominent symptom and not itching. This went on for some six years, not improving and not getting any worse, and amenable to treatment by cold lotions. About August, 1906, the itching became more pronounced but still associated with pain. I analyse my symptoms in this way—First I would feel pain about the anus and the surrounding parts, which would then become moist and followed by intolerable itching. My life was miserable, sleep broken every night, and no remedy except anaesthetic ointments gave relief. I tried everything I could think of and everything I saw recommended. There was no local cause and no sugar in the urine. This went on until I was operated on by Mr. McAdam Eccles in October, 1909. The operation was successful; I had immediate and complete relief. The parts were devoid of sensation for some time, but now—February, 1910—sensation has returned. I have had no trouble of any sort, but even slight constipation should be guarded against.

Because some authors state that this operation should not be lightly undertaken I was deterred from submitting to it, but if local treatment fails to relieve I think operative treatment is strongly to be recommended.—I am, etc.,

February 24th. A BART'S MAN.

CREMATION AND THE CATHOLIC CHURCH.

SIR,—Your article on cremation and the attitude of the Catholic Church thereto seems particularly well informed. There appears to be no doubt that the objections of the ecclesiastical authorities to the practice might be withdrawn if sufficient cause were shown. Even now, as I understand, no objection would be made to cremation if urgent necessity arose—as in the case of plague, to prevent contagion after a battle or disaster, or the like.

I suggest that the various Branches of the British Medical Association should lay before each bishop of the diocese the importance of cremation as a means of preventing the spread of disease in crowded communities. Mention might also be made of the fact that this would enable the ashes of the deceased to be preserved in the church, which is quite impracticable at present.

If a strong case were then made out there is little doubt that the ban on the practice would be removed and cremation soon become almost universal.—I am, etc.,

March 14th. D.P.H., M.A.R.U.I.

ON SALE OR RETURN.

SIR,—I have received a copy of the February number for the present year of the *Rivista Italiana di Neuropatalogia, Pschiatria, et Elettroterapia*, directed by Professor G. d'Abundo, for which the annual subscription is 25 lire. The copy has gummed on it a slip on which is written, "Celui qui ne nous renvoie pas cette livraison restera abonné pour toute l'année 1910." I am writing to protest against this method of attempting to force the sale of this journal; I do not see why I should be given the trouble of having to return it, and I doubt very much whether there would be any legal power to enforce the subscription, but in any case I think some public notice should be taken of a very undesirable proceeding which would be an unmitigated nuisance if it were to find imitators.—I am, etc.,

Birmingham, March 12th. ROBERT SAUNDBY.

Obituary.

JAMES RUTHERFORD, M.D., F.R.C.P.EDIN.,

FORMERLY PHYSICIAN SUPERINTENDENT, CRICHTON ROYAL INSTITUTION, DUMFRIES.

BY the death of Dr. Rutherford on March 8th Scotland has lost one of her most capable and notable psychiatrists, one who was widely recognized as a bold and original leader, and endeared to his many friends by admirable qualities of head and heart. He was the son of a Presbyterian minister who served in various parts of Scotland, and was born in 1840, so that he had just attained his 70th year. Although he had been disabled by failing health for some time, and suffered what must have been, especially to a man of his energetic temperament, a serious impairment of his physical powers, his mental capacity and alert outlook were happily conserved, and he could review the long and important work of his life with a brightness and clarity which were always characteristic of his attitude. Dr. Rutherford knew what he wanted, and got it done.

His professional education having been begun at Edinburgh and Vienna, he was well equipped for the work which he undertook. In 1863 he became M.D. and L.R.C.P.Edin., in 1866 he attained the Fellowship of the Royal College of Physicians there, and, in 1875, the Faculty of Physicians and Surgeons of Glasgow also admitted him to its Fellowship. Foreign countries recognized his eminence in the profession, and Dr. Rutherford was an honorary member of American, Belgian, French, and Italian associations for the study of psychological medicine. In 1867, along with the late Dr. Lockhart-Robertson, he produced a translation of Griesinger's memorable *Manual of Mental Diseases*, which was published by the Sydenham Society. His writings, however, were few in number and in words. He was eminently a man of action, and could not be induced to occupy the honourable positions to which his colleagues would fain have called him. Ready always to debate and explain and advise in private, to oblige in detail, Dr. Rutherford would not pass beyond his self-imposed restrictions. It is a distinct loss to the profession that he remained one of those skilled physicians whose knowledge unhappily dies with them.

That knowledge was garnered in various fields. He began as Assistant Medical Officer in the Birmingham Borough Asylum and was appointed Medical Superintendent of the Argyll and Bute Asylum in 1870, in succession to the late Sir John Sibbald. In that remote hospital he found that many new ideas had been adopted in practice, he gained the confidence of the late Sir James Coxe, and Argyll became noteworthy for the abolition of

airing courts, for the open-door system and the enlargement of freedom and useful occupation of patients which Dr. Rutherford advocated and maintained after his promotion to the Lenzie Asylum, which, in 1874, was the latest and most complete example of asylum planning and management. From the agricultural community of Argyllshire he entered on the service of the City of Glasgow with an energy and fearlessness which made Lenzie famous. In 1883 the directors of the Crichton Royal Institution, Dumfries, appointed him to that important hospital, where he had to deal with large numbers of all classes of the insane. Twenty-three years of strenuous labour at Dumfries completed the work of Dr. Rutherford's life. When he took office the property of the institution extended to 150 acres, and the patients were accommodated in the First House, the Second House, and the villa of Maryfield. When he retired the property had extended to upwards of 1,300 acres, and the patients were accommodated in fourteen separate houses, many of them stately and imposing buildings, which will remain a memorial of him in future times. Amongst the additions and improvements which owed their inception to his unbounded energy, special mention may be made of the introduction of the present copious water supply from the famous artesian well of the institution, the installation of the electric light—which was pronounced by Dr. Bottomley, the nephew of the late Lord Kelvin, to be one of the finest private installations in the kingdom—the addition of the handsome dining hall to the First House, the enlargement of the north portion of the Second House, and the erection of Johnston House as a laundry residence, the extensive model farm buildings, the sanatorium for tuberculous patients, the various hospitals and villas for both the private and the parochial patients, and, lastly, the magnificent Crichton Memorial Church of cathedral proportions, which was commenced in the golden jubilee and completed in the diamond jubilee year of the late Queen Victoria, and was erected as a memorial to the revered founders of the institution. The Crichton Church is one of the most beautiful modern ecclesiastical structures in Scotland, and it was fitting that the idea of such a memorial should have emanated from the brain of a reverent and religious man and a son of the manse.

The history of Dr. Rutherford's professional life is a tale of success founded upon an energetic ability that seemed perennial. Largely it was the outcome of his amiability and personal incentive, which made for increased freedom, open-air occupations, recreations, and improved environment directly due to an indomitable trust in his people.

It is hardly three years since Dr. Rutherford retired on a pension of £1,600 a year, and made his home, as his distinguished predecessors Dr. W. A. F. Browne and Dr. Gilchrist had done, in the immediate neighbourhood of Dumfries.

In early life he married Miss Freer, of Melrose, by whom he had a large family. Three sons adopted their father's profession, one being Dr. Rutherford, of Brislington House. Two daughters are married—to Dr. Keay, of Bangour Village Asylum, and to Dr. Gilmour, of Scalebor Asylum, respectively. Many are the medical men who were happily associated with Dr. Rutherford in personal service, and still more numerous are those friends who have reason to remember him with gratitude and now mourn his loss.

The interment took place at Dumfries on March 12th, the coffin being borne from the cemetery gate to the grave by eight of those who had been longest in Dr. Rutherford's service at Lochgilphead, Woodilee, and Dumfries. A funeral service was held on Sunday, March 13th, in the Crichton Memorial Church, and was attended by a large congregation of friends and mourners from the institution and district around.

Dr. CLOUSTON sends us the following personal appreciation of Dr. Rutherford:

He was a man of distinctive personality and great force of character. A boldness of action was his most marked feature. The practice of psychiatry and the medical superintendence of a great mental hospital are full of all sorts of risks which paralyse some men. Caution and the avoidance of those risks come to be dominating motives with some of them. The fear of suicides and accidents, the dread of coroners' inquests and Commissioners' censures, and, above all, the terror of the local newspaper, seem ever present. To escape these disagreeable things becomes almost an obsession. Rutherford was altogether free from this feeling, and he realized that liberty is so strong a feeling in human nature that happiness and contentment cannot be attained if it is unduly restricted, either in a mental hospital or in society. He saw that the mere restriction of liberty in such a hospital, necessary though it may be in many cases, prolongs the disease for the cure of which the patients are sent there. Therefore he deliberately ran many risks for the sake of curing his patients and increasing their happiness. I remember saying to him once, to console him after an accident to one of his patients, "It is a bad asylum which has no accidents," and he fervently concurred with me. The policy of the Scottish Commissioners lay in the encouragement of any new modes of treatment, even if risks were attached to them. They were not too hard on a superintendent when accidents occurred not due to carelessness but to deliberate attempts to increase the contentment and chances of recovery of patients. Rutherford taught us all many lessons by his boldness. He showed us that we might risk more than we had hitherto dared with advantage to our patients. He was a first-rate administrator, and, coming back to his native country in 1870 from England, where more was then done to make the wards of mental hospitals bright and cheerful by means of decorations, pictures, singing birds, and music, than had been done in Scotland previous to the Sixties, he set an example in those respects that was soon universally followed. He was an enthusiast in his work—too much so for health, for he took too few holidays—and a man of a kindly disposition who knew human nature well. I consider mental hospital management in Scotland stands much indebted to Dr. Rutherford.

Dr. C. C. EASTERBOOK, successor to Dr. Rutherford at the Crichton Royal Institution, writes:

Rutherford's work for the insane was well recognized both at home and abroad. With the exception of several original and striking papers in his early graduate days, and his translation of Griesinger's standard work, Rutherford contributed little to the scientific literature of psychiatry, but he used to the full his remarkable gifts of administration in translating theory into practice. He will be remembered, therefore, not so much for his writings as for what he did to advance the care and treatment of the insane. He did not seek the posts of honour in the psychological and neurological societies of the home country, but few of his contemporaries in this country received as much recognition in the speciality abroad as did Rutherford, who was elected Foreign Associate, Corresponding or Honorary Member of various Medico-Psychological Associations in Belgium, France, Italy, and America. When Rutherford decided on his life-work, the modern humane treatment of the insane, which is indissolubly associated with the efforts of Pinel of the Bicêtre at Paris, and Tuke of The Retreat at York, during the close of the eighteenth century, had long been established, and furthered in this country by such workers as Charlesworth, Gardiner Hill, Conolly, Browne, and others, who during the first half of the nineteenth century abolished mechanical restraint from their asylums, and introduced many novel methods of moral treatment, which were based on the principle of extending to the treatment of the insane the same privileges, recreations, and occupations as were enjoyed by their more fortunate sane brethren. Much, however, still remained to be done. Rutherford was not only a strong supporter of the non-restraint system. He went further than this, and warmly advocated the cause of greater liberty for the insane, and this took shape in his practice in the adoption of the open-door system, the liberal prescription of healthy outdoor employment and exercise, and the generous use of parole both within and beyond the grounds of the institution. No man had a kinder heart for the insane than Rutherford; and there can be no doubt that the wide adoption of his methods in this country and abroad has promoted the recovery and conduced towards the greater contentment and happiness of numberless afflicted ones. His Majesty's Commissioner in Lunacy, writing at the

time of Dr. Rutherford's retirement, said of him: "The loss to the institution and to the cause of progressive lunacy administration in Scotland, which Dr. Rutherford's resignation entails, can only be truly estimated by those who have watched his career, and who are interested in the difficult problem of the care of the insane. Dr. Rutherford was a bold and original administrator, who never hesitated, from motives of timidity or self-interest, to introduce new and original methods of care and treatment which he considered to be of advantage to the insane as a class. At a time when the general provision for the housing of the insane in the asylums of Scotland was not so liberal as it now is, he was one of those who, by his example and action, promoted a movement which resulted ultimately in a complete structural renovation of almost all the institutions of the country. This movement was, no doubt, often open to the charge of extravagance, but its general influence for good was unmistakable. In addition, he promoted the industrial employment of the insane, the open-door system in asylums, and liberty on parole to individual patients." Dr. Rutherford was a man of tall and commanding physique, energetic and sanguine, and of great amiability and personal popularity. His kindly heart and genial sympathy endeared him personally to his directors, staff, and patients, and to his many friends both in and outside of the profession. He was for many years a Justice of the Peace for the county of Dumfries, and he leaves a widow and family of four sons and four daughters. Three of the former are in the medical profession, and two of the latter are married to doctors in the speciality.

Dr. J. F. SUTHERLAND, one of the Deputy Lunacy Commissioners for Scotland, writes:

The demise of Dr. James Rutherford, late Physician Superintendent of the Crichton Asylum, Dumfries, leaves a blank in psychiatric and asylum circles not to be easily filled. Among asylums men he was unique in respect that as an able and experienced administrator and organizer he followed methods largely or entirely of his own conception, methods which made the Crichton a success from every point of view, financial and otherwise, and a kind of Mecca for specialists on the look-out for something new and useful. During his reign of twenty-four years at Dumfries, the Crichton acquired a great reputation for the provision it made for paying patients, and attracted hundreds from Ireland as well as Scotland and the North of England. His guiding principle—a most sound one, and one vital to good results—was the segregation and classification of his private patients to the utmost degree which with the funds at his disposal he was able to accomplish in a way and to a degree not possible in district asylums for the insane poor even in the villa asylums of modern times. Thirty-three per cent. of the patients were to be found in detached villas all over the large estates acquired. Thus it came about that there grew up at the Crichton a series of villas graded by payments to which patients after assortment were sent. In these houses there was much family life, and remarkable tranquillity prevailed as the result of the selection. Richly endowed as the Crichton was by the bequest which bears the name, by successful management and good results he added considerably to its resources by attracting paying patients from a wide area of country, and in this way was enabled to lessen the maintenance cost of the chargeable insane for the Border Counties of Dumfries, Kirkcudbright, and Wigtown. His successful financial policy enabled him to erect a beautiful Gothic church—the Crichton Memorial Church—by some critics considered far too costly for its object, and apt to remind one of Lord Rosebery's *bon mot* on a memorable occasion of the "gilded sepulchres of the intellectually dead"—an expression which caused a good deal of favourable and adverse comment at the time. He did much to encourage the employment of the patients in outdoor work and farming. Indeed, the farm, stock, standings, etc., visited by skilled agriculturists came in for warm commendation, and in this department he took a keen personal and untiring interest. A feature of the place was the magnificent artesian well he discovered by boring after much trouble, and from it there pours an unlimited supply of cool refreshing potable water which has quite a cerulean hue as it bursts forth like a fountain. Dr. Rutherford made little or no claim to scientific methods, although he fell in heartily with the establishment of the original research laboratory of the Royal College of Physicians, at the same time setting up a department of the kind in the asylum in which his assistants did good work.

The time is not yet when anything very definite can be claimed for the scientific treatment of the insane; but that treatment, so long followed successfully, which consists in rest, varied labour adapted to the capacity and tastes of patients, healthy, comfortable, and cheerful surroundings, good nursing, good food, etc., found in him a warm supporter. Of a genial and kindly nature, Dr. Rutherford was beloved by his patients, all of whom he knew by head mark, and for all of whom he had a kindly smile and word as they passed him. Others who knew him longer and more intimately than the writer of this brief appreciative notice will be able to speak more fully of his marked administrative qualities manifested through a long series of years at the Crichton, Glasgow, and Lochgilphead. These have been again and again attested in the most ungrudging fashion by the Commissioners in Lunacy, Drs. Fraser and Macpherson.

JOHN R. HUGHES, M.D.EDIN., M.R.C.S.ENG., L.S.A.,

SENIOR SURGEON TO THE DENBIGHSHIRE INFIRMARY AND CORONER FOR WEST DENBIGHSHIRE.

WE regret to record the death of Dr. John R. Hughes, of Denbigh, on March 12th, at the age of 82. His health failed rapidly during the last winter, and about a fortnight ago he was seized with bronchial congestion to which, with heart failure, he succumbed. Dr. Hughes graduated M.D.Edin. with honours in 1851, and was Senior Surgeon to the Denbighshire Infirmary and Coroner for West Denbighshire until he died. He was formerly President of the North Wales Branch of the British Medical Association, and contributed papers on sanitary measures and on diphtheria.

At one time he was a very conspicuous supporter of the Conservative cause which, in such a Radical borough and county, required no little courage. He was one of the oldest and most respected practitioners of his extensive district, and will be much missed by his numerous friends. He had for some time been associated in practice with his nephew, Dr. James Hughes.

IN Dr. JOHN COCKTON of Ulverston, who died on March 7th of pulmonary haemorrhage, North Lancashire has lost a practitioner who was highly esteemed both for his attainments and for his character. Dr. Cockton received his medical education at the University of Edinburgh. While a student he suffered from an attack of croupous pneumonia, the results of which not only retarded his graduation but also left permanent impairment of the lungs, which was no doubt the foundation of the illness to which he has now succumbed. He sought health by a visit to Switzerland, and also by acting as ship's surgeon on several voyages. He graduated M.B., C.M.Edin. in 1888, and shortly afterwards went as Assistant to the late Dr. Abram Thompson at Ulverston, near Maryport. After some years, though still in indifferent health, he began independent practice at Maryport, where his family had long resided; but eleven years ago, on the death of Dr. Fox Jackson, who had succeeded Dr. Abram Thompson, Dr. Cockton succeeded to his practice and to the appointment of Medical Officer to the North Lonsdale Iron and Steel Company. He never held any public office, but won a high place in the town of his adoption on account of his straightforward character and his practical sympathy with the poor and suffering. For some years past he had suffered every winter from bronchitis, accompanied occasionally by pulmonary haemorrhage, but he preferred to continue his work, and, as we have said, died almost suddenly in the 50th year of his age. Dr. Cockton, who never married, resided with his sisters, with whom much sympathy will be felt. The funeral, which took place at Ulverston Cemetery on March 10th, was largely attended.

UNDER the will of Mr. G. H. Swonnell the Bolingbroke Hospital receives £500, and the Norwood Cottage Hospital and the Croydon General Hospital £250 each. The residue of the estate, amounting to about £27,000, is bequeathed to King Edward's Hospital Fund for London.

Universities and Colleges.

UNIVERSITY OF CAMBRIDGE.

Conferment of Degrees.

THE following degrees have been conferred:

M.B.—J. R. Briscoe, H. Selwyn; E. B. Clayton, Caius; H. L. Duke, Caius; B. Hughes, H. Selwyn.
B.C.—J. R. Briscoe, H. Selwyn; E. B. Clayton, Caius.

UNIVERSITY OF LONDON.

MEETING OF THE SENATE.

A MEETING of the Senate was held on February 23rd.

Physiological Laboratory.

The annual report of the Physiological Laboratory Committee was presented. It stated that during the year four courses of lectures were delivered, one of eight by Dr. Waller on Some Recent Advances in Physiology; one of eight by Dr. A. Harden on the Chemical Biology of the Yeast Cell; a third, also of eight lectures, on Chloroform Anaesthesia by Dr. G. A. Buckmaster and Mr. J. A. Gardner, and a fourth, of five, under the Brown Trust, on the Influence of Alcohol, Sugars, and Glucosides on the Growth and Mutation of Bacteria by Mr. F. W. Twort. A lecture on Artificial Pathogenesis was delivered by Professor J. Loeb on June 25th.

M.S. Degree in Dentistry.

Regulations have been adopted for the establishment of Dental Surgery as a second branch, in which the degree of Master of Surgery can be obtained. The examination in this, as in the existing branch, will be open only to candidates who have taken the M.B., B.S. degrees. The first examination will be held in December, and candidates intending to enter for this or for any subsequent examination are required to give four months' notice. Copies of the regulations may be obtained on application to the university.

Staff Examiners.

The following are among the staff examiners appointed for 1910–1911:

Experimental Psychology.—William McDougall, M.B., B.Ch., M.A., M.Sc.
Forensic Medicine and Hygiene.—Professor H. J. Campbell, M.D., and Henry Franklin Parsons, M.D., D.P.H.
Medicine.—Professor A. H. Carter, M.D., Sidney P. Phillips, M.D., G. Newton Pitt, M.D., and Samuel West, M.D.
Mental Diseases and Psychology.—Robert Jones, M.D., and Charles Mercier, M.D.
Obstetric Medicine.—C. M. Handfield-Jones, M.D., and G. H. Drummond Robinson, M.D., B.S.
Pathology.—Professor A. S. Grünbaum, M.D., and Professor R. Tanner Hewlett, M.D.
Pharmacology.—James Calvert, M.D., and Professor A. R. Cushny, M.D., F.R.S.
Physiology.—J. S. Edkins, M.B., and Professor Francis Gotch, F.R.S.
State Medicine.—D. S. Davies, M.D., D.P.H., and H. Franklin Parsons, M.D., D.P.H.
Surgery.—A. Carless, M.S., F.R.C.S., Raymond Johnson, B.S., F.R.C.S., William Thorburn, M.D., F.R.C.S., and H. J. Waring, M.S., F.R.C.S.
Tropical Medicine.—C. W. Daniels, M.B., and Andrew Duncan, M.D.
Veterinary Anatomy.—O. C. Bradley, D.Sc., M.D.
Veterinary Pathology.—William Bulloch, M.D.
Veterinary Physiology.—Professor W. D. Halliburton, M.D., F.R.S.

Studentship in Physiology.

A university studentship in physiology of the value of £50 for one year will be awarded to a student qualified to undertake research in physiology, and will be tenable in a physiological laboratory of the university or of a school of the university. Application must be sent to the Principal on or before May 31st, 1910.

Advanced Lectures in Physiology.

A course of eight lectures on the physiology and anatomy of the central nervous system will be given by Dr. Gordon M. Holmes in the physiological laboratory on dates to be announced later. The course has been recognized as a course of advanced lectures which a candidate at the B.Sc. examination may name for part of his practical examination.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN ordinary Council was held on March 10th, 1910, Mr. H. T. Butlin, President, in the chair.

The Royal Commission on University Education in London.

The President, Mr. A. P. Gould, and Sir Henry Morris were appointed witnesses to give evidence on behalf of the College before the above Commission.

Annual Report of the Proceedings of the Central Midwives Board.

This report, drawn up by Mr. C. H. Golding-Bird, was entered on the minutes, and the Council returned its best thanks to Mr. Golding-Bird. The report ends with the following expression of opinion: "I cannot but feel that the board has during the past year done its utmost to see the provisions of the present Act properly carried out; and where for want of power to act it has been unable to enforce any step that it considered right, it has still used its influence in that direction to the utmost. The revision of the present Act of Parliament at the earliest date, now that its weak points are recognized, is anxiously awaited."

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AN extraordinary Comitia was held at the College on March 14th, the President, Sir R. Douglas Powell, in the chair.

Proposed Joint Action with the University of London.

Sir William Allchin, in proposing the adoption of the report of the delegates appointed by the Royal Colleges to consider a scheme for establishing a system of conjoint examinations in accordance with Statute 123 of the University of London, sketched the history, going back to 1834, of the action taken by the College at various times, with the view to the institution of a degree accessible to London medical students. He pointed out that the report itself (which is printed at page 707) would not be presented to the Royal Commission in that form, but was intended to afford a general indication of the lines to be followed by the witnesses who should give evidence before the Royal Commission on behalf of the colleges, in order that these general lines might receive the approval of the College of Physicians, as they had already received that of the Council of the Royal College of Surgeons.

Sir Thomas Barlow moved an amendment, which was seconded by Dr. Rose Bradford, calling attention to the resolution adopted by the Faculty of Medicine of the University of London at its meeting on November 1st, 1909 (see page 709), with regard to the suggested changes in the constitution of the University, and proposing that the College should support the recommendations of the Faculty.

After a prolonged discussion, in which Dr. Herringham, Professor Starling, and Dr. Spriggs took part, a suggestion by Dr. Norman Moore, to refer the report to a large committee of the College, with instructions to report on the whole subject at a future meeting of the College, was adopted. The nomination of the committee was postponed.

Communications.

The following communications were received:

1. From the delegates of the Clarendon Press, asking permission of the College to photograph the portraits of Sir Thomas Browne, Sydenham, and Harvey for the book, entitled *Historical Portraits*. Permission was granted.
2. From the Privy Council, enclosing a further notice of the International Congress of Obstetrics and Gynaecology to be held in St. Petersburg. On the nomination of the President, Dr. Amand Routh was elected to represent the College.
3. From the Home Office, enclosing a letter from the Danish Legation, in which certain inquiries are made respecting the practice of massage. Drs. Sharkey, Ormerod, Batten, Donald Hood, and Lewis Jones were appointed a committee to consider and report to the College.

THE second International Congress on Diseases of Occupation will be held at Brussels from September 10th to 14th. The chief subject for discussion at the congress is diseases of occupation in their relation to accident, with special reference to legislation recently adopted in certain countries and under consideration in others. Other subjects suggested for discussion are, the organization of medical services for industrial workers, the prevention of ankylostomiasis, miner's nystagmus, the prophylaxis of caisson disease, and industrial poisoning. The President of the congress is Dr. A. Moeller, President of the Royal Belgian Academy of Medicine, and the Secretary-General is Dr. D. Glibert. The Brussels National Exhibition will be open during the time the congress is being held, and in it will be displayed models illustrating methods of protection in dangerous trades and the fencing of machinery. A British National Committee to promote the objects of the congress has been formed, with Sir T. Clifford Allbutt and Professor Sheridan Delépine as presidents, Sir Thomas Oliver as president of the executive committee, and Dr. W. F. Dearden, 19, Salisbury Buildings, Trafford Road, Manchester, and Dr. T. M. Legge, Home Office, London, are secretaries. The Home Secretary and Postmaster-General have accepted the office of honorary president of the British National Committee. The subscription of a member of the congress is 16s., and the subscriber is entitled to printed copies of all contributions in advance, and later to a printed report of the proceedings. Members of the families of subscribers will pay 8s., entitling them to all privileges except that of taking part in debates. Membership is not confined to individuals, but also covers societies and associations interested in the study of this branch of medicine, and the support of insurance societies and industrial associations will be welcomed. Forms of adhesion and further particulars can be obtained on application to Dr. Dearden.

Public Health AND POOR LAW MEDICAL SERVICES.

POOR LAW MEDICAL OFFICERS' ASSOCIATION OF ENGLAND AND WALES.

A COUNCIL meeting of this Association was held at 34, Copthall Avenue, E.C., on Thursday, March 10th, Dr. D. B. Balding being in the chair.

Various matters affecting the interests of Poor Law medical officers were considered, among others, whether it was one of the duties of the district medical officer to give certificates gratuitously for the use of education authorities. Dr. Gidley-Moore (Ongar), stated that in his district it was customary for the Education Authority to pay for these certificates. The Council were unanimously of opinion that this was the best and most equitable arrangement. The Honorary Secretary reported that an association of part-time medical officers of health had been formed to protect the interests of part-time officers. One of its chief objects was to obtain the rescindment of Minute 234, passed at the last meeting of the Representative Body of the British Medical Association. He had been asked to bring the matter before the Poor Law Medical Officers' Association with a view to joint action, as their interests were almost identical with those of part-time medical officers of health.

It was proposed by Dr. Toogood, and seconded by Dr. Napper:

> That the Honorary Secretary be instructed to approach the Honorary Secretary of the Association of Medical Officers of Health, with a view to united action in defence of the just rights of the part-time medical officers in both services.

This was carried unanimously, and satisfaction was expressed when the Honorary Secretary stated that he had been elected to the Council of the new Association.

The Honorary Secretary was authorized to make arrangements for the annual meeting at Halifax in June, and the advisability of holding a second meeting in London during the British Medical Association week was considered. The Honorary Secretary said he had received numerous letters from country members urging this course, and it was finally decided to adopt it. The Honorary Secretary was instructed to write to the Medical Secretary of the British Medical Association to ascertain whether such a meeting could be held in conjunction with the meetings of the latter Association.

Medico-Ethical.

The advice given in this column for the assistance of members is based on medico-ethical principles generally recognized by the profession, but must not be taken as representing direct findings of the Central Ethical Committee, except when so stated.

RESTRICTIVE EFFECT OF NEGOTIATIONS FOR PURCHASE.

A. Z., who has been in negotiation with a practitioner about the sale of his practice, but has not examined his books, and has only details of income from the vendor, wishes to know whether, in the event of his offer not being accepted by the latter, he would be entitled to commence practice in the place on his own account. He asks also, in the event of the answer being in the negative, whether the same opinion would hold in the event of the vendor a little later selling the practice to another and leaving the neighbourhood.

*** Our correspondent could not be legally restrained from practising on his own account, but it would be unprofessional to act in this manner. The same reason would not apply at a later period if the practice had been sold to another and the practitioner with whom he had had dealings had left the neighbourhood.

CONTRACT NOT TO PRACTISE.

G. P. writes that nearly nineteen years ago he sold his practice and signed an agreement that he would not practise as a surgeon or medical man in the neighbourhood for a period of ten years. He asks whether there would be anything ethically incorrect in his again residing in that district and practising there.

*** As our correspondent, when selling his practice, only agreed to relinquish practice in that part for the space of ten years, there would seem to be nothing unethical under the circumstances in his resuming practice there.

Medical News.

AT an examination for sanitary inspectors under the Public Health (London) Act, 1891, recently held by the Sanitary Inspection Board, 20 candidates, of whom 13 were women, passed.

THE German Society of Orthopaedic Surgery will hold its ninth congress in the Langenbeckhaus, Berlin, on March 28th and 29th, under the presidency of Professor Georg Joachimsthal.

WE are requested to state that the announcement of our lobby correspondent in our issue of March 12th as to the scale of fees for census enumerators was incorrect. We are informed that no such fees as those indicated have been paid, and that there is no probability that such fees will be paid.

THE library and offices of the Royal Society of Medicine were closed on March 15th for the purpose of packing and removing the society's library, etc., to the temporary quarters which have been secured at 15, Cavendish Square. The library and offices will be opened there on the morning of Monday, April 4th. About 20,000 volumes consisting of the books which it is believed are most likely to be wanted will be available in the temporary library, and the remainder will be stored during the building of the society's new house, which it is hoped will be ready for occupation early next year.

A FABIAN medical conference is to be held at Easter at the Fabian Summer School, Pen-yr-allt, Llanbedr, near Barmouth, North Wales. Papers will be read on March 26th by F. Lawson Dodd, M.and L.D.S., R.C.S., D.P.H., on the present and future organization of the medical service; on March 28th, by Mr. Somerville Hastings, M.S., F.R.C.S., on the proposals of the Minority Report in relation to the medical profession; on March 29th, by Dr. Lionel Tayler, on alcohol and national health; on March 30th, by Dr. C. W. Saleeby, on eugenics and national health; and on April 1st, by Dr. H. Beckett Overy, on evolution and disease in relation to the socialist state. On the evening of March 31st there will be a discussion on the organization and work of school clinics.

THE hundred and thirty-seventh anniversary dinner of the Medical Society of London was held at the Whitehall Rooms, Hôtel Métropole, on March 9th. The President, Dr. Samuel West, who was in the chair, in proposing the toast of "The Society," explained how it was that the society had decided to remain outside the Royal Society of Medicine because it was thought that the Medical Society would have lost its identity by being merged in the proposed amalgamation or association of the special sections of medicine and surgery forming the Royal Society of Medicine. The Medical Society of London had nothing but good will towards the Royal Society of Medicine, and had shown that feeling by the readiness with which it had come forward to help the Royal Society of Medicine in finding accommodation for its sections during the period of transition while that society was changing its quarters from its old building to new premises. The Medical Society was in a flourishing condition, its meetings were well attended, the subjects were chosen wisely, and the discussions had been good. The number of Fellows was increasing, and that was satisfactory because it had been thought that the fact that the Medical Society had not joined the Royal Society of Medicine would have caused a decrease in numbers, but now the Medical Society had a considerable number of new members over and above those who had retired at the time of the formation of the Royal Society of Medicine. The financial report of the society was very satisfactory, and was expressed in clear terms so that any one could understand the accounts, and could see what balance was carried forward from one year to another. Mr. Charters Symonds proposed the toast of "The Guests and Kindred Societies," which was acknowledged by the President of the Royal College of Surgeons, Mr. Butlin, who considered that on the whole the Medical Society did quite right in retaining its independence by not joining the Royal Society of Medicine. Sir John Tweedy, who also responded to the toast, declared that the Hippocratic traditions kept up by the Medical Society fostered the best medical talent of the time, and encouraged and stimulated pathological, practical, and speculative knowledge, and he trusted that the society might continue to do so for another 140 years. The health of the President was proposed by Dr. F. de Havilland Hall, and in replying to this toast the President submitted the toast of the two Honorary Secretaries, Dr. Guthrie and Mr. Warren Low, at the same time paying a high tribute of praise to the librarian, Mr. G. Bethell, for his successful efforts in forwarding the interests of the society.

Letters, Notes, and Answers.

BRITISH MEDICAL ASSOCIATION AND BRITISH MEDICAL JOURNAL.

THE offices of the British Medical Association and of the BRITISH MEDICAL JOURNAL are at 429, Strand, London.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

RUSTICUS asks for information *re* the treatment of diabetes by calcium iodide from one who has used it.

INCOME TAX.

D. F. inquires whether the expenses attending his removal from one town to another can be claimed as a deduction in arriving at his income tax assessment.

*** These expenses would not be allowed. Under the Income Tax Acts only professional expenses incurred in the course of earning the profits of the year are admissible, a distinction being drawn between such expenses and those incurred in order that the taxpayer may be in a position to earn the profits.

ANSWERS.

STOVE FOR INVALID'S BEDROOM.

DR. E. H. BALDOCK (Hereford) writes: If "H." will make inquiries concerning the "Esse" stoves made by the Columbian Stove Works, he will find just what he wants.

DR. JOHN HAMILTON (Ealing) writes: For one month or longer I used a Roberts's patent asbestos stove in a bedroom. It burns coal. It burns twenty-four hours without attention; it neither gives off fumes nor smoke, and is a most excellent stove for purpose wanted.

DR. R. M. FRASER (Belfast) writes: "H." will find in a descriptive list of anthracite stoves of W. Kemp and Co., 159, Buchanan Street, Glasgow, one called the "Mistletoe" (heating capacity 2,000 c. ft.), suitable to the requirements of a bedroom. In plain black finish it is cheaper, looks better, and radiates more heat, according to elementary physics than enamelled. If "H." has not had any experience of anthracite stoves he should procure the best quality of anthracite nuts. Combustion is regulated by throttling the inlet and also the exhaust. If the draught in the chimney is strong it will probably be advisable to have some arrangement in the iron sheet which closes the chimney place in the nature of a sliding panel or flap valve to temper the suction in windy weather. "H." will find these stoves economical, saving in domestic labour, diffusing a not unpleasant heat, and presenting—to use an Ulsterism—a "heartsome" appearance when the red glow is seen through the mica front.

DR. L. W. K. TRUBRIDGE (Hoo, Rochester) writes in reply to "H.": For years I have used stoves manufactured by Musgrave, of Belfast and London. They consume anthracite or coke (also cinders). Anthracite is free from fumes. They are most economical, and by their use a room can for months be maintained at an even temperature. At the end of perhaps six months one might have to let it go out to clean the flue pipe, but while alight a moderate sized stove will go unattended for twelve hours, it can be filled to give great or moderate heat, and in the latter case one can within half an hour have a big fire. At all times there is great freedom from draught in the room, which also is kept dry. I should certainly recommend a stove with mica panels in the door.

FOOD AND PHYSIQUE.

ENQUIRER.—As the Departmental Committee on Physical Degeneration was not able to come to any positive conclusion, we can hardly hope to supply our correspondent with the sort of evidence that would satisfy him as to the diminished physical robustness of the wage-earning classes. Many things are generally accepted as highly probable that are difficult to prove, especially when, as in this case, a comparison is suggested between the present condition of the population and that of a hundred years ago. Of the latter, we can only have such information as is to be found in literature or in the memory of old people, which may be, as he says, "vague, partial, and second hand," but we know that a hundred years ago we faced the world in arms, and that great battles by land and by sea were fought by men drawn from the rural districts who had been brought up in England on bread and bacon, in Scotland on milk and oatmeal, and in Ireland on potatoes and buttermilk, but who had no tea, coffee, or cocoa, and little butcher's meat. From the tone of our correspondent's letter we gather that he would not consider such evidence conclusive, and so he must be content with the result of his own reading, namely, that "he has found indications of apparent change for the worse."

THE "LEBENSWECKER" TREATMENT OF SCIATICA.

NEURITIS.—"Lebenswecker" is a term given to a form of acupuncture instrument invented by a "Nature healer" of Bonn, named Baunscheidt. The method is known as Baunscheidtism, and is defined in Gould's *Dictionary* as "a mode of treating rheumatism or other chronic neuralgias by counter-irritation, the latter being produced by pricking the exterior of the part affected with fine needles dipped in oil of mustard, formic acid, or other irritant." The Lebenswecker consists of a number of sharp needles which are driven into the skin by a special mechanism. The small wounds are then rubbed with an irritant, usually croton oil. The action thus depends solely on counter-irritation, which, however, is considerable, in view of the nature of the material applied. Whether this method of treatment yields better results in sciatica than other counter-irritants we are not in a position to state, but, as it is said to be widely used in Germany by the members of the medical profession, it appears to be outside the realm of quack treatments.

LETTERS, NOTES, ETC.

RED LINE ON GUMS.

DR. HERBERT LUCAS (Huntingdon) writes: I was much interested in Dr. Arbour Stephens's note on this condition. For many years I have been observing it in cases of tuberculosis; in fact, I look upon it as a diagnostic sign. I should like to hear the experience of others on the subject, and their suggestions as to the cause.

AN APPEAL TO FREEMASONS.

DR. WILLIAM WILSON (Secretary St. Luke's Medical Lodge of Instruction, 184, Goldhawk Road, W.), appeals to medical men, and medical Freemasons in particular, for votes for the Masonic charities. At the forthcoming elections in April and May there are two medical candidates. Votes for any of the Masonic institutions will be equally acceptable, as exchanges can be effected.

THE EARPIECES OF STETHOSCOPES.

DR. CHARLES W. CHAPMAN (London) writes: If Dr. Hobhouse has indiarubber earpieces he will have no more pain from using the stethoscope. The most recent pattern has an enlargement beyond the part which slips over the metal end to prevent the latter "threading" through the earpiece, which is a great advantage. In my work I have frequently to use the stethoscope for three or four hours consecutively, and, although my ears are very sensitive, I have no trouble or inconvenience from it.

APPENDIX DYSPEPSIA.

DR. W. BLAIR BELL (Liverpool) writes: I was much interested in the obscurer phenomena associated with appendicitis some years ago, before the area of my surgical activities became more restricted by the demands of modern specialism, which would only allow a gynaecologist to remove an appendix on the principle that it is permissible to shoot a fox in Scotland. The recent correspondence has interested me, therefore, not a little, and, if I have read correctly, the whole discussion appears to centre round the differentiation of "appendix dyspepsia" from other forms of indigestion. If this be so, I should like to refer to the paper I read on the subject of "Chronic Appendicitis" before the British Medical Association at Oxford *six years ago*, in which the etiology, pathology, symptoms, diagnosis, and treatment of indigestion associated with chronic appendicitis were fully considered. This paper was published in the BRITISH MEDICAL JOURNAL on October 29th, 1904, and is therefore open to the inspection of all who may be interested in the subject, and especially of those who think that "appendix dyspepsia" is a recently discovered symptom complex, and has not been investigated before. It is only too apparent that Mr. Moynihan is fully justified in recalling attention to this important subject.

AN OBSTETRIC TACKLE.

LIEUTENANT-COLONEL HUGH L. DONOVAN, R.P., A.M.S., M.D. (South Yardley), writes: In continuation of my letter published on October 30th, 1909, p. 1288, I think the most generally useful form of "director" will be found to be a strip of celluloid 1 in. wide, $\frac{1}{32}$ in. thick, and 12 in. in length, perforated with holes large enough to admit a finger-tip. The holes should be about 1 in. apart, and moulded so as to preserve the strength of the structure. The finger passed through the holes can feel the head and move the "director." Both ends of the "director" can be introduced into the vagina. Celluloid can be softened by heat.

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